OUR FEATHERED FRIENDS GRINNELL

Rights for this book: Public domain in the USA.

This edition is published by Project Gutenberg.

Originally <u>issued by Project Gutenberg</u> on 2021-02-10. To support the work of Project Gutenberg, visit their <u>Donation Page</u>.

This free ebook has been produced by <u>GITenberg</u>, a program of the <u>Free Ebook Foundation</u>. If you have corrections or improvements to make to this ebook, or you want to use the source files for this ebook, visit <u>the book's github repository</u>. You can support the work of the Free Ebook Foundation at their <u>Contributors Page</u>.

The Project Gutenberg eBook of Our Feathered Friends, by Elizabeth Grinnell

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

Title: Our Feathered Friends

Author: Elizabeth Grinnell and Joseph Grinnell

Release Date: February 10, 2021 [eBook #64517]

Language: English

Character set encoding: UTF-8

Produced by: Tom Cosmas derived from materials made freely available at The Internet Archive and are placed in the Public Domain.

*** START OF THE PROJECT GUTENBERG EBOOK OUR FEATHERED FRIENDS ***





THE WAX-WING

OUR FEATHERED FRIENDS

BY

ELIZABETH GRINNELL

AND

JOSEPH GRINNELL



BOSTON, U.S.A. D. C. HEATH & CO., PUBLISHERS 1899

Copyright, 1898,

By D. C. HEATH & CO. TYPOGRAPHY BY J. S. CUSHING & CO., NORWOOD, MASS. PRESSWORK BY ROCKWELL & CHURCHILL, BOSTON.

INTRODUCTION.

This volume really needs little by way of introduction. No one can mistake the evident love for our feathered friends, the kindly assistance that has been given them, and the success of the authors in imparting to others much of that pleasure which they have undoubtedly derived from their studies.

The same recreation lies within the power of all who through inattention and thoughtlessness neglect the almost priceless relief from daily burdens afforded by such pursuits. Every one can learn something of the ways and doings of our little friends, even though he may never write a book or put a pen to paper concerning them.

Knowledge thus acquired is not wasted; it elevates the mind and trains the senses, so that in after life the habits of observing and noting frequently become of great use, and are never a detriment.

Our authors have set forth the wanton destruction of bird life consequent upon the use of feathers and parts of birds to ornament hats. They have in no way misstated; for tens of thousands of birds are annually offered on the altar of fashion to gratify a cruel and barbarous survival of savage adornment. Yet the male friend of the lady who wears upon her head a gorgeous array of mutilated, misshapen, and dyed birdskins may have done something to assist in a similar destruction of bird life. As a boy perhaps he wantonly deprived some bird of her eggs; and later, when possessed of a gun, he may have shown little discretion or thought when depriving the nestling of a mother or father who alone could feed and protect it. And as a man, too often it may be, he has allowed savage instincts to dominate his acts instead of the knowledge derived from experience and thought.

It lies within the power of many who will read these pages to assist in the distribution of evidence and in the enlightenment of others, to the end that the useless slaughter of birds and the destruction of their eggs may be prevented, or at least greatly mitigated.

Within a few years past efforts have been made to have one day a year in the schools set aside to study and consider the ways and interests of our feathered friends. The matter is of national importance, and deserves the interest that has been taken in it; but without the hearty cooperation of teachers and their efforts to interest and instruct their charges, there is little likelihood of accomplishing the end desired.

Each farmer or occupier of a tract of land has it within his power to set aside some portion of otherwise non-usable land to afford shelter and concealment for many birds, and to protect those useful species that select and require special locations in which to rear their young. The presence of birds in a locality lends a charm to the landscape which nothing else can lend. An abundance of useful and attractive species may be encouraged to remain and breed if heed is paid to their requirements, and efforts to disturb them in their orderly pursuits be prevented. With slight care such species as are not a detriment or nuisance can be assisted, and thus the value of birds as a feature of the landscape, as insect destroyers, and as vocalists can be more and more demonstrated and appreciated.

There is a book, large and bulky, yet within the reach of every one; little work is required to handle it, for its pages are always open, and it is written in the universal language. It costs nothing to read many chapters, yet, as in all good things, a little patience and some experience will assist greatly in acquiring a fair understanding of its contents. In this great Book of Nature will be found much concerning that rich and varied division of animal life to which has been given the name of Birds, and its relation to the welfare and enjoyment of humanity.

Certain helps have been invented by the experiences and intelligence of man to assist those who through inattention, unfavorable environment, or otherwise, have been unable to acquire that knowledge of this book essential to a correct understanding of their relation to animated nature.

Such a help is this little volume, which it is hoped may prove useful and instructive to many whose knowledge of bird life is small, and also be well worth a reading by those whose more extended opportunities have permitted a wider knowledge of ornithology.

WILLIAM PALMER.

NATIONAL MUSEUM, WASHINGTON, D.C.

Seek the children, little book: Bid them love the bird's retreat, By the brook and woodland nook,
In the garden, in the street,
In the tree above the shed,
Underneath the old barn eaves,
In their bed high overhead,
Where their crazy-quilts are leaves.

Bid them find their secrets out,
How to understand their words.
Play the scout in woods about.
Listen slyly for the birds.
Hark! I hear a child-bird say,
Piping softly in the dell,
"You may stay and see us play,
If you only love us well."

Pasadena, Cal.

CONTENTS.

CHAPTER		PAGE	
	Introduction	<u>iii</u>	
I.	The Message of a Mocking-bird	<u>1</u>	
II.	Some People we like to Know	<u>5</u>	
III.	Civilized Birds	<u>9</u>	
IV.	How Birds Dress	<u>13</u>	
V.	How Madam Bird combs her Hair	<u>18</u>	
VI.	WHAT BIRDS CARRY IN THEIR POCKETS	<u>22</u>	
VII.	Child Birds	<u>28</u>	
VIII.	How Baby Birds are Fed	<u>33</u>	
IX.	At Meal-time	<u>39</u>	
X.	Seed-eaters and ${f M}$ eat-eaters	<u>45</u>	
XI.	Some Birds with a Bad Name	<u>50</u>	
XII.	Before Breakfast	<u>57</u>	
VIII	Our Birds' Restaurant—Meals at	CO	
XIII.	All Hours	<u>62</u>	
XIV.	Umbrellas and Other Things	<u>68</u>	
XV.	Cradle Making	<u>73</u>	
XVI.	Our Screech Owl	<u>78</u>	
XVII.	BIRDS AT WORK AND PLAY	<u>83</u>	
XVIII.	Some Other Birds at Work	<u>89</u>	
XIX.	A PET HUMMING-BIRD	<u>97</u>	
XX.	How we took the Humming-birds'	100	
	Pictures	<u>100</u>	
XXI.	Our Robin Redbreast	<u>107</u>	
XXII.	More about Our Robin	<u>111</u>	
XXIII.	Going to Bed and getting up	<u>116</u>	
XXIV.	Mrs. Towhee proposes a Garden	122	
	Party	<u>123</u>	
XXV.	At the Garden Party	<u>129</u>	
XXVI.	Our Bird Hospital	<u>137</u>	

ILLUSTRATIONS IN THE TEXT.

	PAGE
Mocking-bird	<u>2</u>
The Young Mocking-bird that lost its Tail in the	1
Door	4
Crow Blackbird	<u>11</u>
Turkey Buzzard	<u>15</u>
Mountain Quail	<u>20</u>
Ruby-crowned Kinglet	<u>23</u>
Short-eared Owl	<u>24</u>
NEST FULL OF YOUNG BIRDS	<u>27</u>
LINNET	<u>30</u>
Humming-bird feeding her Young	<u>35</u>
Blue Jay	<u>38</u>
DOWNY WOODPECKER	<u>42</u>
CHIMNEY SWIFT	<u>46</u>
Arkansas Goldfinch	<u>47</u>
KING-BIRD	<u>51</u>
Loggerhead Shrike	<u>53</u>
English Sparrow	<u>55</u>
Brown Towhee	<u>58</u>
Song Sparrow	<u>64</u>
Baltimore Oriole	<u>75</u>
Ground Owl	<u>77</u>
Screech Owl	<u>79</u>
Barn Swallow	<u>87</u>
Marsh Owl	<u>88</u>
Costa's Humming-bird	<u>89</u>
Cat-bird	<u>94</u>
Brown Thrush	<u>95</u>
Anna's Humming-birds	
Robin	<u>108</u>

Western Bluebird	<u>117</u>
Whip-poor-will	<u>121</u>
Рневе	<u>124</u>
FLICKER	<u>127</u>
California Bush-tit and Nest	<u>132</u>
Meadow Lark	<u>135</u>
WAX-WING	<u>139</u>
Snowy Heron	

OUR FEATHERED FRIENDS.



CHAPTER I.

THE MESSAGE OF A MOCKING-BIRD.

It was in the year 1877, before any of the children who read this book were born. We were living on one of the great reservations in the Indian Territory. Some one knocked at the door. When the door was opened, there stood a little Indian girl, her head all covered up in a bright shawl. She was shy, as Indian girls were before they had seen many white people. Very timidly she drew her hand from under her shawl and gave to us a baby mocking-bird. Then she turned and ran down the prairie toward her buffalo-skin lodge not far away.

We understood. The little girl's name was Kitty-ka-tat. She had been to our house often. She knew that we liked pets of all kinds, and birds most of all, so she had captured this one for us by a kind of snare or trap. Of course we kept it, for we did not know where its nest was. We allowed it to use the whole house for a cage. It ate wherever we ate, and slept at night on the curtain pole above the window.



Mocking-bird.

But the perch it liked best by day was the top of its master's head. As soon as

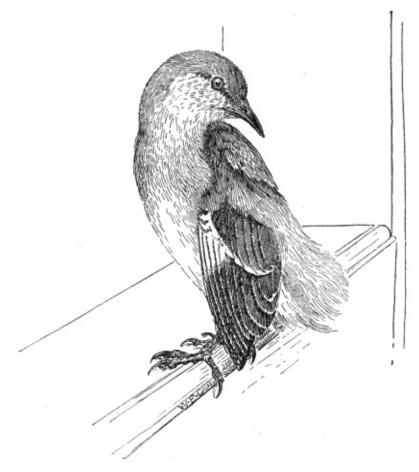
this gentleman came in and sat down in the rocking-chair and put on his skullcap, the bird would fly to his shoulder. Sometimes it would take a nip at his ear or his hair. Then it would give a hop and a flutter, and land in the middle of the black skullcap, where it would sit for an hour if no one disturbed it. It liked to take crumbs from our hands, or bits of apple from our lips, standing on our shoulders. It bathed every day in a large pan of water placed in the middle of the carpet. Then, too wet to fly farther, it would flutter all dripping to a low stool, where it would dry its clothes after the wash. If a door chanced to be left open, the bird would fly to the top of it and preen its feathers and look about at us below in a very pretty way. So you see the little thing really washed and dried and ironed its clothes.

One day when it was perched on the top of the hall door, as happy as could be, a gust of wind quickly blew the door shut, with a loud noise. The bird gave a sharp scream and flew to the window. We looked and saw a strange sight,—a mocking-bird without a tail.

The little bundle of feathers had been shut in at the top of the door when the wind closed it; and there sat poor birdie, a mere chunk of a darling, turning its head from side to side and looking sadly back at the place where its tail had once been.

We opened the door, and down fluttered every one of the beautiful feathers. Birdie eyed them with a puzzled look, canting its head, as though it were saying, "I don't understand it at all." Then it looked backward again in a very pitiful way. We couldn't help laughing, though we were so sorry for the bird. In a short time the feathers grew again, and the little fellow showed great care in preening them and placing them just as it thought they ought to grow.

After a while there came to be a little baby in the house, and the mocking-bird seemed to understand. Two grown-up people had been its only friends before, but it was never afraid of the stranger baby from the first time it saw him. It would fly from any perch to where the baby lay and peep into the baby's face in the sweetest way, as if saying, "Glad to see you, little man." Then it would twitter a low song, which sounded very much as if it were singing, "Little one, when you grow up, be kind to the birds and love them."



THE YOUNG MOCKING-BIRD THAT LOST ITS TAIL IN THE DOOR.

"Be kind to the birds and love them" was the little mocking-bird's message, or so it seemed to us.

The baby and his mother never forgot the message of the mocking-bird. They have loved birds ever since. That is why they are writing this book about birds for the children.

CHAPTER II.

SOME PEOPLE WE LIKE TO KNOW.

WE are always interested in our nearest neighbors. "Who lives in the next house?" we ask. "Are they pleasant persons to know?" and "How many children are there?"

These are questions one commonly asks. But we are not speaking just now of men and women and children who live near us on our street. We are speaking of people all about us in our yard, and in your yard perhaps,—little, winged, beautiful people, who make it so pleasant with song and chirp and flutter,—the birds.

We like to think of the birds as creatures better and more lovable than lizards and worms and other crawling things. We know a lady who calls them "Angels," because they have wings and seem to fly far off into heaven. No one ever jumps away from a bird, as some foolish people do from a snake or a mouse. Most snakes and mice are as harmless as birds, but they do not win their way to our hearts as the birds do.

The yard or field that has the most trees and shrubs in it will also have the most and the merriest birds. Very few birds choose to live on a desert. They like shade and grass and flowers as well as we do, and fruit trees and berry bushes, and the sound of life and fun.

When we see a big tree chopped down, we think of the birds who will miss it. Watch them yourselves. See how they light on the fallen boughs, and peep sadly under the wilting leaves, and twitter about their loss. Birds are like ourselves; they like to live in the places that are familiar to them, because here they feel at home and safe. We sometimes think we can hear them singing, "My country, 'tis of thee,—of thee I sing."

Their "country" is our yard, and your yard, or the woods or the city streets and house roofs, and they love it. We should respect their rights and let them have their little "America" in peace. We can apply the Golden Rule as well to our treatment of the birds as to one another.

There are enemies which are very troublesome to the birds. Two or three hawks, some owls, and a few boys, delight in scaring or killing them. We have never seen a little girl harm a bird, and we know many boys, as well, who would not hurt a bird "on purpose." Their worst enemies are the cats.

These enemies do not come sailing over into the birds' country in ships, or marching up the coast in troops, carrying guns and beating drams and making a great noise. They are cowardly, sneaking enemies. They jump one at a time over hedges and fences, and they crawl under bushes barefoot, and dart across the street when no one is looking. They are so still, gliding on their soft feet, that no one of the bird family can hear them coming. So whole nestfuls of baby birds are gone before their mothers know it.

Cats have learned that they are not welcome in our yard. If one of them slips in before we are up in the morning, the birds tell us by a sort of "shriek," and we hurry to help them. We have seen six or seven different kinds of birds crying at a cat and flying at him at one time. They even nip at his back, and dart up so quickly that the cat has no chance to spring at them.

The orioles and mocking-birds are our best watch-dogs, screaming with very angry voices at sight of a cat, and warning all the other birds in the yard to "look out." In the orchard there were some stray cats that nobody owned, and we thought it right to shoot the hungry, thieving things. One mocking-bird, who had been robbed once by these cats, would point out a cat to us, flying on ahead, and would not jump away at the sharp bang of the gun. She seemed to understand perfectly well that we were protecting her and aiming at the enemy she feared so much.

We have read how wild beasts from the jungle prowl around the homes of India to snatch the children and carry them off. How careful the mothers must be, always watching for the cruel animals and dreading their quick spring!

The mother birds in our yard are like those human mothers in India. You have only to watch them when a cat comes prowling around to see how very much like human mothers they are. They scream and dart about in fright, and if you go near they will fly not from you, but toward the cat. They are asking you for help.

Birds near your house soon learn to know the family if every one is kind to them, when they have once learned that you are their friend. They will allow you to call while they are eating their meals, or to watch them while nest-building, although they may be almost within reach of your hand. They will even wait around the door for you to shake the tablecloth after dinner, or to throw out the contents of the crumb-pan, hopping about at your feet without a thought of fear.

We never can learn all there is to know about birds. We can know only a little about them if we study them all our lives.

There is a great professor in a California university who has been trying all his life to get acquainted with fishes, and yet he says he has much more to learn about them. Very little people, like birds and fishes and insects, can interest very great men, and we often see the greatest men the kindest to small creatures.

We speak of birds in this book as "people," because they seem very near to us. They are beings who think and plan and love, and who know what it is to be sorry or glad, just like ourselves.

CHAPTER III.

CIVILIZED BIRDS.

In new parts of the country we do not find so many birds living near houses as we find in older towns. Where there is much wooded or uncultivated land for them to live and nest in, the birds prefer to stay at some distance from us. But after the fields are all ploughed, and the trees cut down, they become civilized and learn to love our gardens and barns and houses.

We speak of birds as "wild" or "civilized," just as we speak of the races of men. The birds in our yard are civilized. They will eat cooked food if we give it to them. They will bathe in a tub, if it is handy, as if it were a brook in the woods. They will nest in cosey nooks about the home in the vines and under the barn eaves, or in little houses which we build for them and set up on poles or in the arbors. They will follow the furrow which the plough makes, looking for worms, and will help themselves to our fruit without waiting for an invitation.

Many of them soon learn to prefer the barn-yard to the field, and will hop about with the chickens under the horse's feet. The sparrows and towhees come every day when the cow eats her pail of bran. They gather about close to her head and watch for her to finish her meal, very much as you have seen one dog watch another dog at his bone. When the cow is done, the birds take possession of her pail and pick out every crumb she has left.

The blackbird^[1] is more civilized than most other birds. You are all acquainted with him, for we find him at home almost everywhere. Though he dresses differently in different parts of the country, he is always a blackbird. Where we live he has a white eye, like a tricky horse. He likes the company of sheep and cattle in our pastures and lanes.

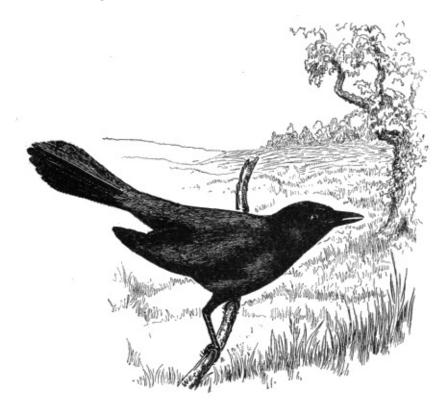
[1] In the west, Brewer's blackbird, *Scolecophagus cyanocephalus*; in the east, purple grackle, *Quiscalus quiscula*.

We have seen these birds taking a free ride all over the fields, while the good-natured animals seemed to like it and did not try to shake them off. Once we laughed merrily when we saw a whole flock of blackbirds taking a ride "pig

back," while the pigs rooted away in the ground, paying no attention to the birds on their backs.

Once when we were in Sitka, Alaska, a long way from home, we went out very early to watch the birds. We saw a great black raven on the back of a donkey that had been lying down all night on a bed of straw. The raven pecked the donkey's back and made him get up from his warm bed. Then the hungry bird made a breakfast of the insects that had crept under the donkey during the cold night to share his warmth. We were told that this raven was in the habit of getting his breakfast in this way.

In nesting time civilized birds are glad to get the odds and ends of strings and cotton which we give them. They chirp about it while they pull at the twine, as if they were saying, "What a blessing it is to live among civilized people, who give us strings and other things to make our cradles of."



Crow Blackbird.

They like to scratch in the hay and chaff for kernels of grain. When you see the birds about the barn-doors, or under the shed at the grain, watch them and notice that they do not really scratch, as at first sight they seem to do, but hop quickly on both feet with their toes spread far apart. They hop so fast that you can scarcely see their feet through the flying chaff.

It is hard to be quite certain whether a bird walks or hops when it is after its food on the ground. Some of them, like the sparrows and towhees, have a quick, jerky pace that looks like a very fast run.

Some birds never run or hop on their feet. The fly-catchers and humming-birds belong to this class. Yet these birds are not cripples. Their tiny legs are fitted only to hold them on the perch. If they wish to catch an insect the length of their bill away, they will fly to get it, just as if it were across the yard. Their wings are so strong and move so quickly that these birds do not need to walk or run. They sip their honey or snatch flies and spiders while on the wing.

All birds are alike in many habits, just as people all over the world have some ways in common. Yet there are some birds who are very different from all others. Indeed, there are so many things to know about them, that it is difficult to know just where to begin.

What kind of clothes do birds wear? What do they eat, and when is their meal-time, and how do they fly? How do they make their nurseries or nests, and how do they know just how large these ought to be? Do birds talk and laugh and play at games? What sort of a mother does a bird make, and what do the father birds think of the babies? Do birds have a childhood after their babyhood, and are they allowed by their parents to grow up idle and helpless? Will our wild birds grow tame and trustful if we love and pet them, and do they learn to prefer such food as we eat ourselves? In short, does it pay to cultivate the acquaintance of birds and to think of them as people?

We will talk about these things in this little book, and when we are done, perhaps you will wonder that you did not get up earlier and know more about the beautiful little winged people in your yard.

CHAPTER IV.

HOW BIRDS DRESS.

In temperate climates like this birds do not dress in such bright colors as they do in hot countries. Their coats and gowns are plainer. There are few extremes in color here, as there are few extremes in heat or cold.

We can tell almost any race or class of people by their style of dress or lack of dress. We can name the trees and shrubs and vines by their foliage, which is really their dress; so we know the different kinds of birds by their plumage or dress.

Many birds resemble in color the haunts or places which they like the best. Desert birds are pale or gray, like the sand. Many of those in the tropics are dressed in gay colors, like the bright blossoms about them, while many birds in the cold north are white like the snow. By this we see that in all nature, and especially among the bird people, dress is of great importance.

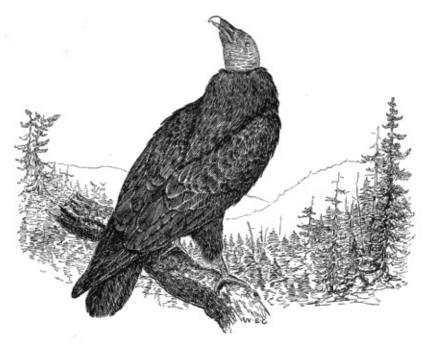
Some of the larger and coarser birds have been accused of being very untidy about their dress. They do not seem to care how they look, and do not show their clothes off proudly as others do. But people who think this have not observed them very closely. Birds like the hawks and vultures are really very neat and tidy.

Turkey buzzards^[2] look very ugly and rough at first glance, but their plumage is suited to their needs, and they take great pains to be clean.

[2] Turkey vulture, *Cathartes aura*.

You will notice that the buzzard has no feathers on his head and neck, and it is this lack of hat or bonnet that makes this bird look so odd and unlovely. But we must not be in a hurry to blame him for this, nor call him hard names because he does not happen to wear a collar or head-dress. There are some things which we do not understand unless we first ask questions or get better acquainted with people.

You see the buzzard, like the scavengers who clean up our dirty streets, is always at work on dead things and scraps of garbage which we do not want. We respect him for doing a very necessary sort of work. He must dress to suit his occupation, like other sensible people, though we cannot help wishing the buzzard had a suit of Sunday clothes.



TURKEY BUZZARD.

He wears nothing on his head because he is obliged to reach far in beneath bones and thick skin in search of food. If he wore a head-dress, like his neighbors, it would get very foul and ill-smelling, and we should think him far more untidy than he is. As it is, he can slip his naked head into marrow bones and out again without much trouble, and not be afraid of spoiling his hat, as other birds would.

We would not care to be daily companions of the buzzard and the carrion crow, although they are useful and interesting birds. We would prefer to be in the company of better dressed and better bred people.

Most of the birds we know think a great deal about their dress. They work much of their time to keep it tidy and in good order. They mend their clothes, too, although they do not use a needle and thread. A little girl we know laughed heartily one day when we told her that the robin mends her dress when it is torn.

The little girl had only to watch and see that Mrs. and Miss Robin, and other birds as well, smooth out and fix up the torn and rumpled feathers till they look as good as new.

Different kinds of birds have different fashions, but these fashions never change. A bird to-day dresses exactly as its grandmother did, and the birds never seem to make fan of one another for being old-fashioned.

Once in a long while we find a solitary bird different in color from others of its kind. We have seen a white blue jay, and there is in our yard a brown towhee which has two white feathers in its wing. Such birds are very rare, as are people who have a spot of white hair on their heads when all the rest is dark; or albinos, that is, persons with pink eyes and very white skin, although they belong to a dark race.

Two suits of clothes a year are quite enough for most birds, while one suit is all that others can afford. But birds are very careful of their clothes, although they never try to dress more gaily than their neighbors and friends. They only try to be clean, and so they set us a very good example.

Sit down on the grass under a tree, or on a seat in the park, and see the birds dress themselves. Every separate feather is cleaned and pulled and looked over, just as a woman cleans and stretches delicate lace and embroidery. See how the loose feathers are pulled out and dropped, like so many useless ravellings or worn threads. The bird watches the falling plume until it reaches the ground, canting her head to one side to see what becomes of her tatters, and then she goes on with her dressing.

Madam Bird manages very well to twist about and reach all of her clothes except her head-dress. Have you wondered how a bird can turn its head all around in a way that would cramp your own neck if you should try it? The neck of a bird is more flexible than yours; that is, it is furnished with more joints, so that the bird can turn its head readily and dress itself with ease.

A bird never changes the whole of its dress at once. Little by little the feathers drop out or are pulled away, so that they are not missed. If they should all come out in one day or one week, the bird would be helpless and unable to fly.

If you should attempt to smooth a bird's feathers without knowing how, you would very likely make her look very ragged. Naturalists, who know how

because they have practised so much, can smooth and pull the feathers as well as the bird herself. They can pick up a hurt bird and by a few touches make her look respectable.



CHAPTER V.

HOW MADAM BIRD COMBS HER HAIR.

MADAM BIRD is not able to smooth her head-dress with her bill. What does she do about it? Why, she uses her foot, which serves also as her hand.

Birds are either-handed; that is, they can use the left hand or foot as well as the right. Some people think that a parrot is left-handed, because she always takes in her left hand the cracker or sugar which you offer to her. The next time you feed her, stop and see what you are doing. You are standing in front of the bird and offering her the cracker in your right hand. She is facing you, and of course takes the food with her left hand. Everybody gives her things in the same way, and she naturally uses her left hand, because we teach her to do so.

But wild birds are either handed. Watch and see how they comb their hair, first on one side and then on the other, scratching very fast, as if to get all the tangles out, but never crying, "Oh, don't!" when it pulls. We call the fine feathers "hair," because they grow on the bird's head as our hair does on our own.

See how Mrs. Bird lifts her crown and separates the soft feathers, and fixes her frizzes or bangs, if she wears them. After she has combed her hair this way long enough, she smoothes it down in good order with her hair dressing, as you will see later on.

Did you ever notice a bird wash its ears? That is enough to make you smile, but we assure you it does wash its ears and all around its mouth after its meals, and between meals as often as it is necessary.

Watch your tame canary; he is very much like wild birds in habits of neatness. See him stand on one foot and reach the other foot up quickly between the long feathers of his wing and dig away at his ears, just as if his mother had told him to "get ready for school."

We have laughed many a time to see him wash himself, he does it so deftly and cheerfully, as if it were the greatest fun in the world. Then, to get the corners of his mouth clean, he wipes them on his towel. His towel is his perch or any cross-bar in the cage. You may say he is "sharpening his bill," but he is really wiping his face. He has probably washed it in his bath a few minutes before.

Some birds wear their hair done up high on their heads like a "pug,"—the "crest" as we call it, standing out like the twist of the fashion. Others, such as our mountain quail, [3] prefer something like a Chinaman's queue or the revolutionary braids. Others still comb their hair down plain and neat like little Quakers.

[3] In Southern California, *Oreortyx pictus plumiferus*.

But whichever way a bird dresses its head, it is always becoming and pretty. We have watched birds dressing themselves, sitting or standing on the edge of the tub under the hydrant, or at the brook or puddle, and we have wondered if they were not looking at themselves in the water, flirting and twisting and turning about just like real people at a looking-glass.

Most birds wear short dresses or skirts in true walking style, while a few prefer the trail. But one thing we have noticed: they never allow the trail to drag in the dust or mud, not even the road-runner, whose train is sometimes twelve inches long.



Mountain Quail.

A mocking-bird or a robin will let her train just touch the ground when she stretches up to look about her; but when she begins to walk again she lifts it. So you never see the tip of the longest tail one bit draggled, unless the bird is wounded or sick.

If you watch closely, you will learn to tell a male bird from a female bird by

its dress. To be sure, his coat skirts are cut so much like the dress of his mate that we sometimes have to imagine a good deal to see any difference.

But, as a rule, you can tell the male or gentleman bird because he dresses so much more gayly than his mate, although we do not think he spends quite so much time as she in fixing and mending his clothes and in bathing. The lady bird works harder than her mate in going to market to get lumber and nails for her house or cradle, and so she soils her clothes more. Then she sits longer in the nest and works harder in many ways, never once thinking about putting on an apron.

You must not think too hard of the gentleman birds for letting their mates do the most of the home work, for you remember that it is the male who must always be ready for his place in the orchestra at a moment's notice. He is obliged to make most of the music, and if he should neglect his duty he would probably lose his place and be put out of the choir.

A singer bird has no notes spread out before him, but must go over and over his part, until he knows it by heart with no one to prompt him.

You need not be surprised because we said a bird must get lumber and nails for her house or cradle. If she did not have lumber and nails, she could not do her work. Of course you never hear her pounding with a hammer, still she uses what may be called nails, as you shall see by and by.

I should not have to change my dress
Were I a bird in yonder tree,
And say, "Excuse me, if you please,"
When callers come to visit me.
But I would fly upon a bough.
And say, "My dear, come right up here."
And we would sit and swing and chat
Beneath the sky so blue and clear.

CHAPTER VI.

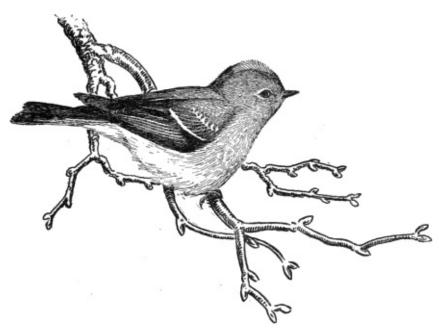
WHAT BIRDS CARRY IN THEIR POCKETS.

Some birds wear on their heads plumes, or bright and showy hats. These they sometimes lift in true bird style. There is the ruby-crowned kinglet^[4] which one sees in the garden trees. When this little king lifts his hat, he shows what looks like a ruby crown or jewel on top of his head.

[4] Regulus calendula.

Other birds wear cocked hats, or tall silk hats with waving plumes. You can imagine almost anything you like in the dress of a bird, from his hat to his shoes. When a bird who wears a hat is surprised by another bird, or is angry, or when he wants to "show off" to his mate while paying his respects to her, he lifts the feathers on the top of his head; and this is what we call "lifting his hat."

Many of our merry little bird friends, both male and female, wear bonnets or hoods, which we think are tied closely under the chin. Others, like the woodpeckers, wear collars of lace. This lace is made of loose, filmy feathers, as different from the feathers of the breast or back as embroidery is different from closely woven cloth.



Ruby-crowned Kinglet.

When a warm day comes, you will see the birds lift their wings and hold their feathers close, and pant with their bills open. How tired they look, and the song or twitter which you hear is a weary one, as if they were saying, "The oldest inhabitant never saw so warm a day." In a cold snap the dress fluffs out, and the bird looks much larger than he did on the warm day. It seems as if he were saying, "See me make my wraps as big and thick as I can."

Many of the birds that sit up and fly about all the long cold night are more warmly clothed than most day birds, who tuck themselves into bed as soon as the sun sets. Examine the owls and see how warmly they dress. Many of them wear trousers of feathers, reaching to the knees or coming low down to the ankles. Often their feet are covered with feathers down to their sharp claws. Their necks, too, are all wrapped up with feathers, like comforters or woollen scarfs, so that only the bill may be seen.



SHORT-EARED OWL.

It gets pretty cold in the middle of the night, and Mr. Owl knows how to wrap himself up. Besides, with these thick, soft feathers he can fly after his prey without making any noise.

A bird's shoes and stockings are strong and never seem to wear out. If they become worn, they are mended so quickly you never know the difference. The foot and leg are covered with scales, like the scales on a lizard.

Birds and lizards are much alike; in fact, they are a sort of cousin or distant relative, so that they dress alike in the matter of shoes and stockings. Only the lizard wears scales all over, while a bird wears them only for shoes and stockings. The bird has found out that feathers are better for flying in the air, while the lizard, crawling as he always does, is perfectly happy with only scales for clothes.

All birds, big and little, wear warm, fleecy underclothes, better and softer than flannel. You can see bits of these underclothes at the bottoms of the knee trousers or dresses, or, if you happen to be holding a bird in your hand, you can part the outer clothes and see and feel the delicate down. Sometimes, when a bird ruffles his outer garments in washing himself, the soft warm underclothes are in plain sight.

Birds never use complexion powders; that, no doubt, would seem very vulgar to them. But they do use hair oil every day. They carry this mixture about with them in their pockets. By pockets we mean little pouches or sacks which always lie on the back, near the tail. Birds would not be quite dressed without their pockets, and they know where to find them without any trouble. We suppose this is because birds' pockets have always been in the same place.

If it looks like rain, the "hair oil," as we call it, is used more freely. Suppose the lady bird wishes to oil the back of her head and around her face. Of course she is not able to take up the bottle and pour the oil into her hand; but she squeezes a little out with her beak, as you would press a rubber bulb. Then she lays the oil on her back just above her wings.

To get the oil all about where she wishes to put it, she rubs her head against it, twisting and turning her neck, until all the feathers of her head are straight and shining.

When a shower comes, the water falls or slides down the bird's back and shoulders on the oil, never finding its wet way beneath to the underclothing. Birds are like those people who live in the cold and wet north. The Eskimo are said to rub their whole bodies with seal or fish oil to keep themselves from being wet.

Bird babies seldom have any clothing to begin life with. A few, such as the walkers and waders and most of the swimmers, like quail and sandpipers and ducks, are covered with thick down when they come out of their shell.

Many of the bird babies in our yard have hardly a trace of the finest down, while others have a little of it in patches, like tiny shirts or bibs. Birds which have no clothes are hatched in the warmest nests, and are close to the mother's breast almost all the time, until their clothes have time to grow. They do not have oil in their pockets until they have feathers to put it on.



A baby bird has such a wide mouth that he looks very odd. But then, you see, his mouth is wide on purpose, so that the parent birds can drop the food in quickly. If the parents had to hunt around to find six or eight little mouths, many a nice bug or worm would get away and the babies go hungry.

Look into a nest and see that four or five open bills are as much of the young birds as you can catch sight of above the edge of the nest. Each is trying to open his mouth a little wider than his brothers and sisters so that it can get the first mouthful. We have often wondered how the mother knows which bird to feed when she comes to the nest. We spent two or three days once to be quite sure that she fed all alike. She fed them in turn, even though she returned many times, not once giving the last one another bite until she had been all around. We do not know whether she counts them or calls them by name, but she makes no mistake in feeding them.

We saw a humming-bird mother one day stand on the head of one little baby birdling while she fed the other. Not all of her weight was on the bird, of course, but quite enough to make him keep out of her way while she fed his brother.

A baby bird gains nothing by teasing and coaxing; it must wait for its turn to come, no matter how hungry it happens to be. It is probably more greedy than hungry when it wants to get more than its share.

CHAPTER VII.

CHILD BIRDS.

During childhood, that is, during the first season, most birds look quite different from their parents. Many of them do not get the color or texture of grown-up birds for a year or more.

You can soon learn to tell which are the children among the birds by what they wear and by the way they talk. Their voices are childish and coaxing. They sometimes cry, and call in piping tones even after they have learned to fly to the highest tree, or to soar far into the blue sky, just to see how high they can go.

We have sometimes thought that bird children play at games of hide-andseek among the bushes, and that they try to see which one of them can jump the farthest. Watch them for yourselves, and you will see such fun as will make you laugh.

Birds are like other children, they get hungry very often at their play. We have seen whole broods of young orioles following the old birds about and teasing for food long after the next nest of birdlings was hatched. These teasing children were as large as their parents, and might better have been feeding their younger brothers and sisters.

Parent birds often drive their young away from them, and eat the food which they have caught themselves right before the children, as if to say, "Go, find some for yourselves."

In Southern California, where we live, in midsummer the yard seems full of young linnets^[5] coaxing from day-light till dark. All the limbs of the trees are alive with them. They stand in rows, with their mouths wide open, and we wonder how the old birds can take care of so many children at once. We see the young birds teasing one another sometimes, as if they were saying, "Tommy dear," or, "Susy dear, please divide your lunch."

[5] House finch, Carpodacus mexicanus frontalis.



LINNET.

So we see that birds have a childhood as well as a babyhood, but it is very short, for they are soon taught to work hard and to be self-supporting.

A lazy young bird never gets on in the world. Parent birds are very kind but firm. It sounds as if they were sometimes scolding good-naturedly. We imagine them saying to their children, "We have shown you the seeds and the berries, now go to work. If you want food, help yourselves; for we have been to market for you long enough. Dress yourselves, too. See how you each have a bottle of oil. Now be neat and careful of your clothes, for it will be a long while before you get any more."

We have seen young birds make very awkward attempts at dressing themselves. Sitting in a tree, they try to imitate the old birds, fluttering and turning about, and rubbing their small heads on their shoulders, and falling off from the branch in their excitement.

It is this daily care of their clothes that makes birds so beautiful. It seems to

us that they know very well that they will not be able to get a new suit very often, and that they must take good care of those clothes they have. We have never seen child birds smear their food over their faces and clothes, not even when they were eating bread and butter and stewed blackberries. It may seem funny to you that birds should eat bread and butter and stewed blackberries, as if they were cooks and housekeepers. But they really do, as you shall see by and by.

Little birds pay attention to what is said to them. They learn their lessons well, and they "say their pieces" like any child, and, like children, they seem to make mistakes at first. They do not take their dinner-pails and go long distances to school. They learn at home with their fathers and mothers and brothers and sisters.

The school-house is anywhere, in the yard or the woods or fields. If you take the trouble to listen and keep very quiet in midsummer, you will be able to see and hear these bird schools going on at a rate that will make you smile and think that birds are real people.

You can see the children in the nests or on the branches of trees, or even on the ground, learning musical notes, and the letters of their alphabet, and running the bird scale, just like any class in school. Every now and then you will see them skip out for a drink of water at the pump or brook. They may not hurry back at once, but stop to look at themselves in the water and to frolic about in the ferns and grass.

Birds have a very happy childhood. It will pay any child or grown person to spend a whole summer or autumn in studying them and their ways. This would be much better than wishing one could go somewhere, when one hasn't the money to go with, or being unhappy because one hasn't fine clothes and houses.

Young birds do not seem to be very much afraid of us. They only look a little surprised and try to hop a bit faster if we go too near them.

See how queer the tops of their heads look, with the baby down still sticking out in little tufts through the thicker feathers. Their lips, too, along the edges of the bill!—how yellow they are, as though they had just been eating new spring butter.

Those soft yellow lips will soon turn dark and hard from use, just as a real baby's feet lose their pink softness and grow callous when the child goes

barefoot a while.

Altogether, bird children are very interesting, and one who loves them never gets tired of watching them. There is something new and charming to learn every day. We wonder that there are any unhappy or cross or sulky people in the world, when they may have the birds to teach them better.

There is many a kind little boy who picks up a child bird and puts it in a high place out of reach of cats and naughty boys. These may be sure that the mother bird will find her young one, and you may hear her thanking you, if you listen. Besides, every time a boy is good to a child bird he has made his own childhood richer and happier.

O happy little bird-child, full of life and glee, Won't you stay this summer in the yard with me? You shall have some berries when the berries grow;

Berries don't hurt children—mother told me so.

CHAPTER VIII.

HOW BABY BIRDS ARE FED.

Some of the baby birds are nurslings, like the lambs and colts. They are dependent upon what the parent birds first eat and digest. Others eat just what the old birds do from the start. Only you will notice that the mother bird pounds and bruises the food she gives to her young, tapping it on the edge of the nest or on a twig or the ground until it is soft enough for the birds to swallow without danger of scratching their tender throats.

Linnets, pigeons, humming-birds, and some of the finches, are nurslings. The food is prepared for them by the parent birds, and the young are fed by the old bird's bill. We imagine that the bill of the parent bird is the nursing-bottle. The old birds first eat food themselves, and then work it over in their crops into a sort of paste or milky fluid. Then, when the meal is all ready, they alight on the edge of the nest and feed the babies. We have seen humming-bird mothers feed the babies while poised on their wings above the nest.

Perhaps there are four or five finches all clamoring for breakfast, crying, and stretching their little necks up as high as possible. The old bird on the edge of the nest looks at the open mouths of all her babies, and begins at the one she thinks is the hungriest. She puts the nursing-bottle, which is her bill, far down the throat of the nursling, clinging fast to the nest or twig with her toes, and moving her bill up and down, her own throat throbbing all the while.

We once saw a humming-bird feed one of her young ones and then fly away. During her absence the little birds changed places in the nest, turning completely around. When the mother came back to finish giving them their breakfast, she made no mistake, but fed the hungry one, though both had their bills wide open.

When the mother has fed one child as much as she thinks is its share, she turns to the next open mouth. In this way she nurses the whole cradleful, who seem never to be satisfied.



Humming-Bird feeding her Young.

We have seen no "runts" or dwarf birds in a family, as are sometimes seen in a nest of pigs or puppies. The parent birds seem to understand, and to see that each baby has its proper share and not a crumb more. They do not love one better than another.

Some birds keep on nursing their young long after we think the lazy children are large enough to be looking out for themselves. It would be no better than they deserve if they had to go hungry sometimes. We think they often must get very hungry before they have learned to work for their board. This is all right, for if the parents kept on supporting them, what useless creatures they would be!

We shall tell you after a while about our bird's restaurant. We have seen the young birds follow their mother to the table at this restaurant and stand coaxing for the crumbs. At first the mocking-bird mother picks up the food and puts it in the young bird's mouth, and then she flies away. She has given it only a little, just to show the little bird where the food is and how to pick it up himself. There he will stand, looking at the cookie crumbs and teasing as loud as he can, but the mother will not come back. She sits in a tree near by watching to see how her bird child learns his first lesson at helping himself.

After a while, the young bird gets very hungry and begins pecking for the crumbs. At first he makes very awkward attempts at grabbing a crumb, but he succeeds at last and swallows the rest of his breakfast. We laugh, sitting in the shade watching him, and we think his mother is laughing too, in the tree above.

Those birds that do not nurse their young with liquid food are supposed to give them water as well as food, by bringing it to them in their beaks, though we have not seen them do so. Probably the babies are fed on soft worms and fruits until they have cut their first teeth.

How can the little things eat hard seeds and bones before they have any teeth? Does it make you smile and wonder when we speak of baby birds cutting their teeth? Don't you suppose birds have teeth? Of course they have.

Every bird has a set of false teeth working out of sight. Birds never have the toothache, and they do not have to be brave and hold still while somebody pulls their teeth out. They can have a new set of teeth as often as they need them, without paying a good price to the dentist.

Look along the path and you will see these teeth, lying as thick as hail in some places. Little sharp stones, coarse gravel, and fine sand,—these are the bird's teeth. When a bird picks them up, he swallows them, and they go, without any trouble, right where they belong, down to a kind of pouch or pocket called the gizzard. This pocket is lined with very tough muscles. These muscles or rings look something like a fluting-iron or washboard, and as they move they set the teeth or little stones to rolling against the food in such a way that it is soon ground into bits, or rather into paste.

It takes a baby bird a long time to learn to pick up anything with its bill. It will peck and peck at the food without being able to touch it, as we have seen many birds do when brought up in a cage, and as the little mocking-birds do at the garden table.

Once we had some pet orioles, and before we noticed what he was doing, one of them made his bill look like a hawk's bill, all curved or crooked. He had pecked so hard at the food on the board floor of his cage that the hard taps had bent his soft bill out of shape, and it remained so after the bird had grown up. We have seen a blue jay and a thrush and a towhee, each with his beak out of shape, twisted to one side or broken. This must have been done when they were little. Birds, like other people, must have the right start if they are to be beautiful when they are older.



BLUE JAY.

Though young birds can see the food before them, they have to try a long while before they know exactly how to take hold of it. They make us think of real babies trying to pick up some toy with their fat little hands. A bird's bill at first is very soft, like a baby's bones. If you feel of it, you will see that to the touch it is like a piece of rubber.

The difficulty is really more with the bird's eyes than with his bill, for it seems that, although he sees the food which he wants to eat, he cannot measure the distance correctly until he has learned how to see straight and aim right.

"Let me look in your mouth, little bird;
How many white teeth have you?
No teeth? then how do you chew your food?
Be honest and tell me true."

"My teeth are all out of sight, little boy,
They are hard and white and firm;—
Out of sight, but they grind the seeds like a mill,
And the bug, and the nice fat worm."

CHAPTER IX.

AT MEAL-TIME.

If we had twenty birds in a cage and had to hunt for all the food they could eat, the same as they would do if they were free, we should have a busy time of it, and very likely the birds would starve.

Birds have sharp eyes. Watch the finches and see how they hop from twig to twig, pecking at tiny things which we cannot even see. These birds seem to be near-sighted, finding their dinner right under their eyes. We could not possibly see anything so near our faces.

Then there are some of the birds who seem far-sighted, seeing food at a longer distance than we could, and darting for it as quick as a flash.

It is a fact that most birds are both near-sighted and far-sighted. Their eyes are both telescopes and microscopes. Watch Madam Mocker or Mrs. Robin. She will see a grasshopper on the other side of the lawn, or a daddy-long-legs taking a sun-bath at the far end of the picket fence. The grasshopper and the daddy haven't time to get up and be off before they are surprised by Madam Bird's sharp bill.

Birds, like other people, must work if they will eat, and so they go in search of the cupboard or the cellar, and it is sometimes hard work to find them. The cupboard is anywhere in a dry place, and the door is never locked. The cellar is almost anywhere, too, where it is cool and damp, under the grass and chips and down in cracks between logs and boards. The food in the cellar is very unlike the food in the cupboard.

There are some insects that never see the light and cannot bear the sunshine. They are usually soft, tender things, and live where it is moist and cool. We call these the food in the bird's cellar. There are other insects that love the dry air, where it is warm, the bark of trees and the hot sand, and these we call the food in the bird's cupboard.

Birds spend nearly all their time in hunting for something to eat. Life seems

to be one long picnic for them. They digest rapidly. Their food is found and picked up in very small quantities, excepting the food of the gourmands like the buzzards. These birds are certainly not very tidy or nice about their meals. They eat as much as they possibly can, and then sit about on the low fences, or even on the ground, too full and heavy to fly away.

Birds have sharp ears and can hear bugs and worms long before they can be seen. The woodpecker listens for the grubs with his ear close to the bark of the trees. But woodpeckers are not always after grubs when you see them running up and down a tree trunk and pecking holes in the bark. They like the inner skin of the bark for food, and the sap-suckers drink the sap of the tree.

Watch the robin or the mocking-bird on the lawn. You have been sprinkling that lawn for two weeks in midsummer, just to make the grass nice and green. Perhaps you did not think that you were making it easy for the birds to get something to eat in a dry time. But you see that your sprinkling or watering has made the turf mellow and soft, so that the worms can crawl up to the surface more easily than if it were dry. And the birds are making the most of your kindness, as you see.

See how that little bird cants his head and listens. We imagine him holding up his hand and saying, "Don't move, please, nor do anything to scare this worm away. I hear it coming up to the top of the ground, and I am very hungry."



DOWNY WOODPECKER.

Once we saw a very funny sight. A mocking-bird in the yard had grown very tame and had nested close by, taking no pains to fly away from us. She soon came to know that we had something for her to eat when we called, "Come, Chickie," and she would fly close to us with eager eyes, not at all afraid.

Every night at sundown, which is the bird's supper-time, we went to the summer-house and turned over the empty flower-pots. Under these pots little black bugs were hiding, but more especially the saw-bugs, soft, gray, crawling things. The mocking-bird would follow us as fast as she could, picking up the bugs for her young. When she had a mouth full of the wriggling insects, she would go and feed them to her babies and come back again to the moist places under the pots, until every bug was captured.

Once there were more bugs under one pot than she could possibly carry at one time, and she was in great trouble to know what to do about it. She swallowed as many as she wanted herself, and then she began cramming her mouth full for the babies. The bugs looked so tempting, and there were so many, she did not like to lose any of them, and so she kept on picking them up. After

her mouth was as full as it could hold, the bugs kept falling out at the sides of her bill, and she would pick them up again over and over without knowing it, until we scared her away by our laughing.

Some birds, as we have said, such as the owls, take their food whole. Of course, bones, hair, and feathers cannot be digested, so after a time they are thrown up in the shape of little balls, called "castings," and by examining them we can find out exactly what the bird has been eating.

Most of the birds we are acquainted with pick their food very carefully, and eat only that which will digest without trouble. You can see them hold it down with one foot, looking at it closely to be quite sure that it is really good to eat. They often pull it to shreds and swallow it in little bits. If it is a butterfly dinner, the wings are torn off and sent floating to the ground. If it is a grasshopper supper, the tough, wiry legs of the insect are thrown away, and only the rich, luscious breast and fat thighs are eaten.

In California we have the pepper tree, which is all covered with clusters of red berries. Under the thin, red skin is a sweet, soft pulp which covers the seed. The pulp is all there is of the pepper berry which the birds can digest. But this is a very sweet morsel indeed, and tourist birds come a long distance to get it.

Robin redbreasts,^[6] come here in winter to eat our pepper berries, and then, of course, they disgorge the hard seeds, which they cannot possibly digest, just as the owls do the bones of their prey.

[6] Merula migratoria propinqua.

We think the mocking-birds have taught the robins to do this, and we have noticed the wax-wings^[7] doing the same thing.

[7] Ampelis cedrorum.

When the winter tourist birds make a raid on our yards, we can hear the tiny pepper seeds fall in a shower on our tin roofs, under the tall trees, and the doorsteps will be covered. Sometimes the seeds come down so thick and fast that we can think of nothing but a hail-storm. The pepper berries ripen in midwinter, and it is worth one's while to see a flock of robins and wax-wings come into our yard. In a few days almost every pepper tree has been robbed, and nothing is left us but the brown seeds.

These, and other birds from the north who come to pay us a visit in winter,

are tamer than they are at home. They seem to think that we are on our honor to be polite to strangers, and so we are.

If you watch closely, wherever you live, at some time in the year you will see visiting birds in your yard and you ought to be polite to them.

CHAPTER X.

SEED-EATERS AND MEAT-EATERS.

If we wish to keep one of the wild birds in a cage, we usually select one of the seed-eaters. These birds are gentle and are readily tamed. Our tame canaries are descended from the wild seed-eaters.

Seed-eating birds make us think of some nations of men who live on rice or fruit. Those who have been among these people tell us that they are gentle and kind and ready to learn.

Many birds are very fond of spiders. It is said that spiders are a kind of "bird medicine," and that some birds could not live without them. This seems rather hard for the spiders, but sometimes they pay the birds back. There is said to be a spider in a certain part of the world which is so large and strong that it eats birds. It lies in wait and catches small, weak birds as if they were so many flies. This seems very cruel, because we love the birds so much. But we might learn to love the spiders just as well, if we should get better acquainted with them.



CHIMNEY SWIFT.

When you are outdoors just after sundown, you will sometimes see a great many swifts and swallows in the air, darting around in great circles. They do not seem to be going anywhere or doing anything in particular. But you will find that they really have something very important on hand. They are eating their late suppers.

There are tiny insects high up where the birds are flying, whole swarms of them, and these make a delicious supper for the hungry birds.



Arkansas Goldfinch.

The finches, or wild canaries,^[8] as we call them in Southern California, are among our commonest birds. These birds shell plant-seeds before swallowing them, as one can see by watching flocks of them in the sunflower patches. We have thrown hard crumbs out to them in the yard, and they have been seen to crack these crumbs all to pieces, thinking of course that there must be a shell.

[8] Spinus psaltria and Spinus tristis.

The birds do not crack or break their teeth or beaks, be the seeds ever so hard, as a child would be very likely to do on a walnut. Every bird carries a nutcracker about with him wherever he goes. If a finch gets hold of a very tough, hard seed, he slips it far back in the beak, where the angle of the jaw gives better strength or force. He can then break it easily, as you would crack the hardest nut by placing it close to the hinge of the nutcracker.

If the seed is tender or brittle, the bird pushes it to the point of his beak with his tongue and presses on it. Out drops the seed-cover to the ground, leaving the meat in the bird's bill.

Our tame canary has an original way of preparing his food. We give him cookie or bread, and he breaks off bits and carries them to his water dish, into which he drops them. After they have soaked a little while, he goes back and picks them out and eats them. Now his teeth are not at all poor, for he cracks his canary seeds without any trouble. We think he likes a little mush for a change, and so he makes it for himself.

One sometimes wonders why our garden birds do not store away food when it is plentiful, as squirrels do. There are ever so many nice hiding-places all about. Some wild birds do hide their food, thus "laying up something for a rainy day," which we think is about the right thing for birds and other people to do.

One reason why our civilized birds do not store their food is that a supply of one kind or another is almost always to be found. Besides, many of our birds travel about so much, always going where food is, that there is no need of storing it.

The seed-eaters do not travel much, as seeds may always be found, in winter as well as in summer. Birds that depend for food upon insect life must go in search of it as the seasons change.

One sometimes thinks the birds do little else but think about meal-time. A singer will sometimes "make believe" forget, while he sits on his swaying branch, pouring out his throat full of melody, as if he did not care if he never tasted food again. But suddenly, without a hint, there is a stop in the music that doesn't belong just there, and the bird darts to the ground. He swallows a worm or a blue-jacketed fly, and then back he goes to his perch and his song, as if he had not been interrupted at all.

We do not think it is the worst fate in the world to be eaten by a bird and made into song and chirp and flutter. We owe a good deal to the insects, which the birds we love so much could not do without. We ought to think of this and not step on a bug or worm in the path.

Some heartless people think it is a great treat to have a pot-pie made of as many little birds as they can get by paying for them or shooting them,—birds so small that it takes a whole one to make a good mouthful.

We do not think it wrong to have a chicken dinner, or even a quail or pigeon, if we are sick; because it takes only a bird or two to make enough. But we do think it is wrong to take many happy lives just to give one person a dinner, when he could make as good a meal on beefsteak as on a dozen little birds.

Birds have so many enemies that they hardly ever die of old age. We ought to think of this, and do what we can to prolong their lives. There is hardly a spot on earth so desolate that birds are not found there.



CHAPTER XI.

SOME BIRDS WITH A BAD NAME.

A GOOD name is what we all want in this world. We like to have people speak well of us behind our backs. There are a few birds which have a bad name. Sometimes they deserve what is said of them, and sometimes they are quite innocent. It is always well for us to find out for ourselves if what we hear about birds is quite true.

There is a king-bird or bee-martin. Farmers think him a very wicked little fellow, catching the bees on the wing and eating greedily whole swarms of them. Mr. Farmer has not yet found out everything about the bee-martin, or he would know that he eats a good many enemies of the bees, even if he does swallow a few of the bees themselves.



KING-BIRD.

We once saw these birds around our beehive and felt certain that they were

eating the bees. They would dart close to the hives, snapping their bills and looking very savage. But we were willing to watch a long while, that we might be certain if we were not mistaken, and we did just right.

There was some tall grass near the hives, and we noticed swarms of strange looking black-and-blue flies all over the grass. We saw these flies dart out to the front of the hive and kill the bees faster than the birds could have done it.

Waiting a little longer, we found that the birds were on the watch for these flies, and it was these they were catching instead of the bees at that particular time.

A certain naturalist, who has spent a good deal of time trying to find out if the bee-birds do really kill bees, has told us a little secret, which is very interesting and may lead some other people to investigate the matter. He says that he has never found a worker-bee in the stomach of a bee-bird, though he has examined a great many of them. He has found only drones, which the worker bees are very glad to get rid of and often kill, because they are lazy and eat honey without gathering any for winter.

Perhaps one reason why the bee-bird prefers the drone to the worker is because the drones have no stings.

By all this you see that it pays us to take some trouble to find out all the good there is about anybody.

However, it cannot be denied that the king-birds do eat bees, when they can find nothing they like better. We have often wondered what they do with so many stings, and why they are not poisoned by them. We have not examined a king-bird's throat to find out this secret, but a friend of ours did look at the throat of a toad which persisted in eating his bees on warm summer evenings. This man found a good many stings on the side of the toad's throat, which had caught there when he swallowed the bees. Stings are probably not poisonous to toads and bee-birds.



LOGGERHEAD SHRIKE.

Hardly anybody speaks a good word for the butcher-bird or shrike.^[9] Yet this bird is not half so bad as most people think he is. It is true that he has been caught a few times in doing very naughty things, such as making a dinner on a small chicken, or on birds weaker than himself.

[9] Lanius ludovicianus.

But his most common food consists of insects, especially Jerusalem crickets. This great yellow cricket is an inch or two inches long, and he looks as bad as he is reported to be, for he wears a suit of clothes with brown and yellow stripes, running around, instead of up and down in the usual way for stripes. This makes one think of a convict or a convict's suit of clothes.

Now the shrike, or butcher-bird, does us a great favor by making as many meals as he can of these great crickets. These crickets are the fellows that dig holes in our potatoes while they are in the ground and bite the roots off from our pansies and other plants. The butcher-bird also eats grasshoppers and beetles, and other enemies to our roots and grains. So we see that he is more our friend than our enemy.

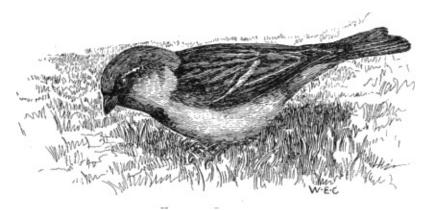
This bird, which we have all learned to despise so much, could teach us a good lesson in his line of work, for he is a very merciful and kind butcher. He is in the habit of killing his victim quickly, and does not hang it up alive on a thorn,

as some people think he does. He probably fastens his dinner in that way that he may pull it to pieces easier and know where to find it when he is hungry again.

The English sparrow^[10] is another bird that has a bad name, and he deserves what is said of him more than some of the other birds. He is quarrelsome and selfish and very unlovable. But in spite of this we have sometimes put him to a good use, and have grown to look upon the little tyrant as quite capable of adding to the comfort of our families.

[10] *Passer domesticus*, introduced into the United States from Europe.

Once there was a sick child in our family, and we happened to think that the sparrow would make a good supper for our little invalid. The birds were "small fry," to be sure, but we cooked them, and they were good eating.



ENGLISH SPARROW.

Then we gathered all the sparrows' eggs we could reach every morning, and cooked them. They were delicious. We felt that it was not wrong for us to take a good many of these eggs, for there were countless more.

We found that we could tempt the hen birds to lay their eggs close to the door, by placing hay above the sills and around the window corners, just as you would make a hen's nest for Mistress Biddy.

This disposition of the English sparrow to become domesticated, like our hens, once came near making trouble in money matters. Captain R. H. Pratt, of the Carlisle Indian School, noting that the sparrows were driving all the other birds away from the school grounds, offered a penny a set for all the eggs which should be brought to him.

The little Indian students, two hundred or more of them, made a raid on the

grounds, and brought so many eggs to the captain that he began to think he should have no money left. He thought, "Surely there cannot be so many nests as there are sets of eggs." So he set himself to work to find out the secret.

It had not taken the boys long to learn that Mrs. Sparrow would lay right along, just like a hen, if the nest itself were not destroyed. The eggs were taken out cautiously as often as four or five were laid, and the industrious little Indian claimed his reward. It was a good scheme at money-making, but the alert superintendent soon found it out, and of course took back his offer. There was no more bounty given for sparrows' eggs that summer.

California farmers complain a good deal about the linnets.^[11] One man whom we know spent whole days in March killing the linnets, because he thought they were eating up his peach buds. In late summer we went over to see him, and what do you think he was doing? We found him pulling off half of the little peaches and throwing them on the ground.

[11] Housefinch, *Carpodacus mexicanus frontalis*.

"Good morning, sir," we said, stopping at the street along the edge of the field. "What are you doing?"

He looked up and answered, "Oh, I am thinning out the peaches. They are too thick on the boughs, and they will grow larger if there are only half as many left. We always have to thin them out in this way before fall."

"But, sir," we said, "don't you think it would have saved you some trouble if you had let the linnets thin the peaches for you in the spring? They would have eaten more insects than peaches, too, and not have charged you a dollar for all their work."

The man looked surprised and scratched his head in a sorry sort of way. Then he said, "Why, I never thought of that. I was told that the linnets do a great deal of damage. I will get them to take care of my peach orchard next year. I am sorry I made such a mistake."

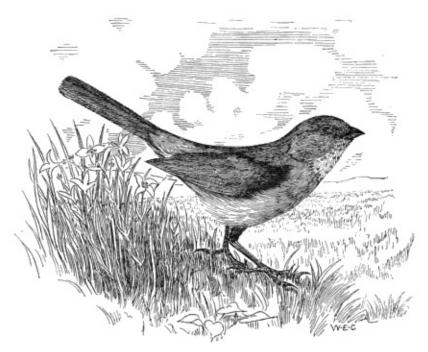
CHAPTER XII.

BEFORE BREAKFAST.

"RING the breakfast bell," cried Madam Towhee, "the sun is nearly up. Rap on your tree, Mr. Flicker, and wake up the linnets."

"You are late yourself, Mrs. Towhee," said Mrs. Linnet; "my children have had their breakfast already."

Mr. Flicker opened his sharp eyes and admired his sharp tail shafts. Then he peeped from behind his tree and called out, "Mr. Mocker kept me awake an hour in the night serenading young Mr. and Mrs. Sparrow. That is why I slept so late."



Brown Towhee.

Mr. Mocker, in the top of his house, rang the breakfast bell. It sounded like the linnet and the towhee and the flicker and the robin all together. The mocker laughed, too, like a dozen birds, keeping his clapper going until the other people in the yard could scarcely hear their own voices. Up jumped little Mrs. Humming-bird and snatched a dewdrop from the cup of a morning-glory on the trellis. "I prefer to drink distilled water," she said, wiping her mouth.

"I like to drink from the hydrant," said Madam Linnet. "Any water is good enough for me." Then she tilted herself on the top of the hydrant and swallowed three drops as they fell from the pipe.

"What makes you always turn a somersault on the top of the hydrant?" asked Mrs. Towhee. "It doesn't look polite to stoop over like that, and drink with your head down."

"I don't drink with my mouth on the edge of the cup, like some people I know," she said in reply to Mrs. Towhee. "Besides, it doesn't wet my face' when the drops fall right into my mouth like this. I like to turn upside down, too; it is good exercise for the muscles. What's the use of a bird always being so proper?"

"Tut, tut!" said Mrs. Sparrow, "see how I drink." And she stood on the edge of the puddle under the hydrant, and laid her breast in the water, and drank, and drank, wetting her face and throat all over. "I'm not afraid of a wetting," she said.

"What's all this talk about drinking?" asked old Mr. Butcher-bird, coming down on the party with a swoop of his wings that scared all the other birds back to the trees. "Don't run away," he said kindly. "I've had my breakfast." Then he began to pull tatters of lizard meat out of his bill.

"Where do you suppose I got that lizard?" he asked of a goldfinch.

"I have no idea," she answered. "I never saw a lizard up in the morning so early as this. Lizards are 'sun birds' and don't like cold, wet grass."

"Ha, ha!" laughed the butcher. "I caught him yesterday asleep, and killed him, and pinned him on a thorn. I always get my breakfast ready over night."

"I wish I had some wine to drink," observed Mr. Oriole, sadly. "The doctor says I ought to drink wine, I feel so weak."

"What do you know about wine?" asked old Mr. Warbler, hopping along where the birds were talking. "I tasted some wine once from a broken bottle at the back door of a dram-shop, and it made me so dizzy I couldn't fly. I had to stay on the shed roof all the morning, feeling so foolish, and expecting to be caught by a cat any minute. I wouldn't drink wine."

"I would, whole bottles of it," declared Mr. Oriole, laughing till he almost cried. Then all the frightened birds came back to the hydrant.

"Too bad! too bad!" cried the warbler, wiping his eyes. "Young man, you will be sorry. I wouldn't have anything to do with a doctor who advised a young man to drink wine because he felt weak. Better go out in the field to work."

"Ha, ha!" laughed the oriole again, amused at his own joke. "See me tap my wine bottles." Then he flew to the berry patch and sipped the red juice of the ripe raspberries, until his mouth and downy moustache were all stained, the little winebibber.

"A pretty drinker you are," said the mocker; "give us a treat."

Then all the other birds fell to tapping the berry bottles, till a lady came out of the house and cried, "Shoo!" flirting her gingham apron at them and rattling her tin pail against the sunflower stalks in a way that made the birds know she was in earnest. Then the lady began filling her pail, while the birds watched her from behind the leaves.

"Keep still," said Mr. Robin; "she'll never see them all. There'll be plenty left. There are always more under the leaves. Let's go off to the strawberry bed."

So the birds flew off to the strawberry bed on the other side of the garden, and picked the ripe red side out of ever so many of the berries. Then a man came out of the house and cried, "Shoo!" just as the lady had done. But he did not begin to pick the berries. He stuck a great ugly scarecrow up in the middle of the strawberry bed, and laughed to himself as he thought how scared the birds would be when they saw it.

But the birds, sitting in the trees, laughed too, and gay old Mr. Mocker said, "He can't deceive us. We know a scarecrow from a man any day."

As soon as the man's back was turned, the birds came down and chattered in the scarecrow's face, and sat on the rim of his hat, and wiped their bills on his coat sleeve, and made themselves very well acquainted with him. All the while the man in the house was saying to his daughter, "I guess those birds will let my strawberries alone now."

CHAPTER XIII.

OUR BIRDS' RESTAURANT.—MEALS AT ALL HOURS.

ONE day in the middle of winter some one suggested that we set up a "Birds' Restaurant" out on the lawn. It was such a funny idea that we had to laugh. After we were done laughing, we went to work, while the birds watched us, as they always do, expecting some surprise.

We set a rustic table under a tree by the summer-house. Then came the question, "What shall we put on it?" We imagined the birds all about were making remarks, and suggesting in an undertone, "Just what you eat, if you please." We remembered that the birds in our yard are civilized birds, and so of course we gave them civilized food.

If you are not well acquainted with the birds, we suppose you will be amused at our mention of bread and butter. But the birds make food a "matter of taste," like other people. They have learned to like the flavor of things they never dreamed of eating when they were wild, just as some races of men leave off eating raw flesh and eat cooked foods when they have been to school a while.

We rolled some cracker crumbs very fine. Then we crumbled a couple of seed cookies, and chopped some walnuts into bits. Then we put some stewed blackberries in a saucer, and a slice of bread and butter on a plate.

This seemed to us like a pretty "square meal" for February birds, and we stood back and smiled at the spread. Some people passing in the street smiled too, and asked if we were having "a picnic, such weather." And we were sure we heard the birds twittering. Of course chairs at our restaurant were out of the question, things were gotten up in such a hurry, owing to the "hard times" among the birds.

We stood behind a hedge and watched to see if company would come. We were not disappointed. First a pair of brown towhees^[12] hopped along and up to the edge of the table. They did not even look for chairs, but went straight for the

blackberries, pecking away at the sweet morsels until they were all gone, and then looking as if they could have taken more.

[12] PIPILO FUSCUS SENICULA.

"Now, Mrs. Towhee," we said, "you had better put up a few cans of blackberries for yourself next summer, if you think they are so nice." She made no answer, but looked as if she expected us to put up enough for ourselves and her too.

Then along came the sparrows.^[13] They took the bread and butter and cracker crumbs. They actually picked the butter from the bread, just as all children do who are very fond of butter, feeling sure of another "spread" when that is gone. In less than an hour that table was cleared of every bit of food. The linnets took the walnuts and what was left of the cookies. Our birds' restaurant was a success. If we could have charged them the regular price for their meals, we should have made money at the business. But though we knew that they had pockets, we had never heard of their carrying money about with them, and so we said nothing about it.

[13] MELOSPIZA FASCIATA HEERMANNI.



SONG SPARROW.

All we ever received from our little guests by way of payment was song and twitter and pleasant company in the cold, sad part of the year, but we thought that was good pay.

We set the table over and over again during the cold spell, watching from the windows when it rained. The birds cared little if the crumbs were wet. Every winter since then we have remembered to do the same thing; and even in summer, especially in nesting time, we do not forget the restaurant.

We usually set the table at night, the last thing before going to bed, as some careful and busy house-wives do, and you should hear and see the fun at sunrise. The table will be all covered with birds of every size and color living near, and they are as good-natured as can be. Food by the saucerful disappears in almost a twinkling, and the birds surround the empty board when they are done, tamer than ever, and asking in coaxing tones for "more."

There have come to be more birds in that corner of the yard than anywhere else, just as you see a street thronged at meal-time about a popular eating-house in the city. We have learned a great deal about the tastes of different birds. Some of them have a "sweet tooth" as truly as any child, for they always choose the cookies or gingerbread.

One day we thought we would see how far they really were civilized in the matter of diet, and so we laid a mutton bone on the table. It was a bone that had been cooked, and had just a suspicion of meat on it left from our own dinner.

Along came the birds, of course, for they were always watching us, canting their heads to get a good look at the strange object. "What do you suppose it is?" they seemed to be asking each other. "Do you think it is safe to taste?"

But they seemed to remember that we never played a joke on them when they were hungry, and in a little while a sparrow pecked daintily at the bone. After this they all fell to eating the meat as fast as they could.

That was not the last bone that found its way to the birds' restaurant. Now we put the bones all about in the apple trees, or swing them on a string from the branches. It is great fun. If you can spare a large beef bone that has some marrow in it, just offer it to the birds in some quiet place. The first bird that gets to it will put his head in at the round tunnel in the middle of the bone, where the marrow is hidden, and you can come pretty near putting "salt on his tail" without his knowing what you are about.

You have all read that queer song Mother Goose made about the "blackbird pie." But that was a pleasant joke. The birds were never baked at all. They were put under the crust alive and well, just to surprise a great dinner party. It was only for ornament, as we put flowers in a vase and set them on the table. Shut up in the dark, in a great earthen pot, with just enough air for breathing coming in at the small holes pricked in the crust, it was no wonder the "birds began to sing" when the cover was lifted. Of course they all began to fly around the room, they were so glad to be free once more and to find that they were not "baked in a pie" at all.

It was a merry surprise for a great dinner party, and quite satisfactory, since there was plenty of food to eat besides blackbird pie. We never look at a field of blackbirds without thinking of the old rhyme and stopping to count the birds, just to see if there are exactly "twenty-four."

Here is a bit of rhyme in imitation of Mother Goose, which we fancy will fit very well when birds are bigger than boys and have pot-pie for dinner.

Sing a song o' sixpence;
A pocket full o' rye,
Four and twenty little boys
Baked in a pie.
When the pie was opened
The boys began to sing;
Wasn't that a dainty dish
To set before a king?

CHAPTER XIV.

UMBRELLAS AND OTHER THINGS.

THERE is more fun than you can imagine in watching the birds in your yard for just one single day. If you are a sick child and cannot go to school, the day will never seem long when once you have begun to get acquainted with these dear little people. If you look a bird straight in the eye when you have a chance to hold one in your hand, you cannot hurt him if you have a bit of a kind heart in your jacket.

Birds' faces are sweet and happy and beautiful, even if they are covered with feathers. You will notice that they have different expressions at different times. But a bird's eye, whether it is black, or red, or white, will tell the story of its fear or happiness as plainly as your own. You may wonder how that can be, when there are no wrinkles to be seen about the face.

We have seen birds do a great many bright things, and we have seen them do stupid things as well. There are wide cracks in our woodshed, and the towhees go through these cracks to the inside in search of something to eat, or just out of curiosity.

When we open the shed door suddenly, the birds are in a great fright. They seem to have forgotten just where they came in, and they flutter about to all the cracks, trying to squeeze their way through, until they find the right one. They do this almost every day, never learning to count or to mark the crack in any way. This is very stupid of the towhees, and we laugh at their shrill squeaks, and their silly way of trying every hole without regard to their size.

These towhees are full of curiosity. There is a rabbit's cage in the yard, and the birds try all day to get in. Sometimes we leave the door ajar, and in they hop. Then what a time. Squealing and fluttering, they fly about as if they were scared nearly to death. We let them out again, and they will hop to a log near by and preen themselves, and in five minutes they have forgotten what happened. Back they fly to the cage again, and are not satisfied till they find a way to get in.

They wait coaxingly about the door, as if they would give anything for a

ticket of admission. Once a curious little towhee squeezed itself into the owl's cage, and we had hard work to get it out alive; and then what should the stupid little thing do but go straight for the canary's cage, hanging under a tree on the lawn. If we want to hold a towhee in our hands for any reason, we have but to set a cage on the grass with the door open, and in a few minutes we have the bird.

We are reminded of something about birds which John Webster wrote more than two hundred years ago. He must have been a bird lover. When speaking of a summer bird-cage in a garden, he observed, "The birds that are without, despair to get in; and the birds that are within, despair for fear they will never get out."

Did you ever stand at the window when it is raining and wonder what the birds do without umbrellas? Of course you have, but you are a little mistaken if you suppose they do not have umbrellas and parasols. Their umbrellas are all about, in the trees and fence corners and bushes, just where they are needed.

See the birds cuddle under a bunch of leaves during a smart shower. See them hunt for the shadiest places when the sun shines warm. Of course they do not carry their umbrellas about with them, tucked under their arms, but they fly quickly to places where they are sure the umbrellas are to be found.

Once in February a humming-bird built her frail little nest close to the path on the low limb of a tree in our yard. Now this eucalyptus tree was very nearly a hundred feet high, and we wondered that the bird built so near the ground, when she might have been so far above. We liked to fancy that she suspected we would not harm her, and that we might possibly help her some if she should happen to be in trouble. She was right, for we did help her in a way we could not have done had she built her nest in the top of the tree.

A fierce hail storm came down from the mountains, and we knew the eggs would be destroyed if we did not protect them. There sat the tiny mother on her frail nest, the great drops of water running off from the point of her slender bill and down over her soft, small sides. We felt very sorry, but you know that just feeling sorry for those who are in trouble doesn't help them very much. So we went to the attic and found an old sunshade which we had put away under the rafters at the close of the summer. We thought it would be just the thing, and so it was.

We tied it to a twig just above the hummer's nest. The mother flew off just for a moment, but came right back. Then she looked at the black roof over the nest and settled down on her eggs quite satisfied, while we stood close by her, wet to the skin in the rain and sleet. It was a long storm, lasting until the eggs were hatched, but the mother was safe, and the baby birds were never wet at all. Since then we have looked all about the yard for humming-birds' nests just before a storm, that we might shelter them.

You have noticed that there are different birds about your yard at different times in the year. Birds are like other people, they like to travel and see the world. They like to visit their friends and get something to eat different from what they have at home.

But birds are very sensible people. They do not pack a valise or a great trunkful of clothes when they go on a long journey. They have one good travelling dress, and they keep that tidy. When they get to the end of their trip, they do not have to annoy their friends with baggage. Probably their visit is all the more welcome. And their visits are usually short. It seems as if they do not want to wear out their welcome.

Of course you have wondered how birds travel, never needing a street, or a railroad track, or a bicycle, or a boat. Perhaps the birds wonder, too, how it is that we never take a flight up into the blue sky, or rest ourselves in the trees, always keeping on the ground in the grass or dust, or in our houses. Perhaps they puzzle their tiny brains to know how it is that we can walk so far without getting tired, and how it is that we are obliged to climb a tree on all fours, like a bear or a squirrel, if we wish to get the nuts which are far up out of reach.

There is no telling what the birds think about us. The same Great One who made the birds with hollow bones and quills, and who filled many little cells of their bodies with air, so that the little creatures might be light of weight and buoyant to fly, also made us of heavier weight and greater strength of muscle.

The birds are not inventors, but man has invented the steam-engine, and the bicycle, and the sail-boat, so that we have come as near flying as we possibly can without being birds.

Almost every boy tries to fly, and he thinks there is some secret about it which he can find out, if he is only patient enough. He gets up on a high fence, and he flaps his arms for wings, and he plays that he is going to fly to the next town. The birds, looking on, must laugh heartily.

Perhaps if the boy's body were boat-shaped, like a bird's body, and if his legs

were put midway between the two ends of his body like a bird's legs, the boy would come nearer flying. But more than all, he would need a good strong pair of wings. We have never seen a boy yet who had wings of any sort.

CHAPTER XV.

CRADLE MAKING.

THERE is a good deal said and written about the way birds build their houses. But, really, birds do not build houses. Their houses or dwellings are built for them by Mother Nature, and are the trees and the bushes, and the sheltering rocks and the caves, and the cornices of our own houses.

What birds really do build are their cradles,—little crib beds, sometimes with rockers and sometimes without.

Birds do not make the cradle first and put the rockers on afterwards, as a cabinet-maker would do. They first choose the best rockers in the market, and then make the cradle on top of the rockers. Sometimes they do a very queer thing; they find the rockers, and then build the cradle under them. Birds have ways of their own, and they are very good ways, as you shall see.

The rockers for a bird's cradle are of the branches of the sycamore, or apple or orange trees, or they are of twigs of the elm or cypress, or banana leaves. Any strong, firm twig or branch that will rock and tilt in the breeze, makes a good rocker of the old-fashioned sort.

"Rock-a-bye baby on the tree top,
When the wind blows the cradle will rock;
When the bough breaks the cradle will fall,
Down comes baby, cradle and all."

But it is a very hard wind that can break one of these rocker boughs or blow a bird's cradle out of its place. Sometimes a crib is blown out of the elbow of a tree, because the nest in the elbow is not fastened by string, as it is in a bough, but is just tucked in between the great branches.

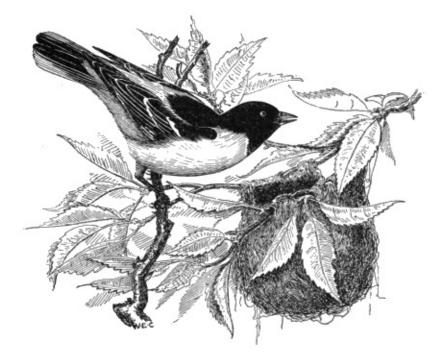
Birds are very wise and select their boughs with great care. Lithe, yielding branches are just right for rockers, they will spring and swing so readily. Sometimes a young twig and a strong old twig, joined together, make a pair of

bird rockers.

A cradle of this kind is very handy for the mother bird. The wind rocks the babies to sleep, and the leaves sing lullaby songs, while the mother blinks away on the nest or goes off in search of food.

Sometimes the mother herself sings the babies to sleep, sitting in the cradle with them. Some of the finches twitter a low musical song over their little ones, and we have often found their nests by hearing these soft, sweet notes. One must listen as well as look, to learn these pleasant secrets.

Some mother birds do not approve of rockers for their babies. These are very sensible mothers. They make their cradles in the firm, still crotch of a tree, high up among the forked branches, or lower, right in the hollow trunk. Other birds choose the ground or low shrubs.



BALTIMORE ORIOLE.

Some cradles, like those of the oriole and titmouse, are curtained all around with beautiful lace fibre or lattice work. Other cribs have no curtains at all except drooping leaves and waving grass.

Those of us who can afford them have eider-down quilts on our beds. But these are rare and costly, and not many people have them. Birds do not have to think about the cost of anything. There must be downy quilts in every nursery. These crib blankets are always on hand. Sometimes they are soft gray or brown in color, and sometimes they are "crazy quilts." It all depends upon what sort of a breast the mother bird has.

At first thought one might fear that such a quilt might be too heavy. You see the old bird fly to the nest and settle quickly down above her young, as if she took her seat right on their frail little backs. She does not take the trouble to explain to you that her feet are below and between the young birds, and that she lifts her feathers gently. She is really a very fluffy "comfortable," soothing and warm, covering the delicate birds, or the still more delicate eggs.

Some birds, like the hummers, build their cradles of material which is just the color of the branch or the rockers upon which they rest. We have seen hummer's nests on orange trees covered on the outside with the black scales which are so frequent on these trees. We have seen them on the sycamore trees all covered with the light yellow wool which grows on the backs of the sycamore leaves. The birds do this that the nests may look like a part of the branch on which they rest. In this way these shrewd little creatures hope to deceive the shrikes and owls and hawks and boys. It is not easy to find a nest that looks just like everything about it.

The ground owl^[14] is a queer bird. She does not select a swinging branch or a crotch of a tree for her babies; but she takes possession of a ground squirrel's hole and lays her eggs there. So you see it is rather a bed than a cradle. If you are in luck, you will find the nest of the ground owl in the ground from four to twenty feet away from the hole or doorway. It may not be more than a few inches under the surface of the ground, but it is hard to know just where to strike it.

[14] Speotyto cunicularia hypogæa.



GROUND OWL.

When a merry schoolboy gets a spade and flings his jacket off and begins in good earnest to dig out a ground owl, take our word for it, he has a good piece of work on his hands. Ten to one he will dig till sundown, and go home tired and cross, with nothing to show for his pains. Mr. Owl, just an inch or two from the tip of the spade, is no doubt holding on to his sides with laughter, if owls ever do laugh in that way.

The nest of the ground owl is not much of an affair, only some coarse stuff lining the hollow at the end of this long hole. Mrs. Owl is lazy, and can leave her eggs in this warm place a long time and be sure that they will not chill. She pays her rent to the squirrels by eating any little squirrels she can lay hands on.

CHAPTER XVI.

OUR SCREECH OWL.

Speaking of owls reminds us of a pet screech owl which once happened to belong to us. One evening in midsummer we heard a thump against the screen in front of the fireplace, as if something rather soft had fallen down the chimney. Of course we hurried to see what it could be, and there was a small mouse, not at all hurt.

We caught it as soon as we could, and found that it was covered with soot from its long, dark journey. Then we began guessing how it happened to get into the chimney-top. There was no possible way for it to do this except by being carried there by some other creature. We at once suspected that an owl had caught the mouse and taken it to the top of the chimney to eat. Here the mouse had managed to escape, falling down the long, gloomy shaft. This was what we imagined, you know.



SCREECH OWL.

Next morning we were under the trees in the garden, when all the birds in another part of the yard commenced such a clatter that we ran to find out the cause. It was a funny sight and a droll sound. There were the mocking-birds, and the sparrows, and the linnets, and the finches, and the bush-tits, and, last and least, the tiny humming-birds, each and all screaming at the top of their voices and hopping about in a certain tree.

We knew in a moment there must be an enemy there, and began to search for him. The birds were not afraid, but flew toward us, looking us in the face, while they screamed louder than before. By this we knew that we must be very near the enemy.

It did not take much hunting to find the cause of the uproar. On a low branch of the tree sat a screech owl, [15] blinking away sleepily. He was not at all

embarrassed by so many callers, nor frightened by their noise.

[15] MEGASCOPS ASIO BENDIREI.

One of us reached up behind the bird and took hold of him around the legs and tail, grabbing him firmly, so that he could not bite or get away. Then we brought an unused robin's cage and put the owl in it. He began to spit at us, as a cat does when it is angry or frightened, and this excited the birds all the more. They followed us while we took the cage to the back door-steps, and then they took their places on the clothes-line and the pump and the bushes near by, chirping and scolding in a bustling way that was quite laughable.

More birds came in from the neighboring yards, and the din they all made grew so great that we had to shut the owl in the woodshed. Then the birds seemed to hold a council to talk the trouble over, and to devise ways and means of getting rid of the enemy. At last they seemed to settle the matter, and went away. But we noticed a number of linnets and a mocker in sight, as if they had been left in charge as spies, and spies they were in fact.

As soon as we took the cage out again and attempted to pet the owl and watch him, these spy birds gave a shrill call, when back came all the other birds. We carried the cage to the upper balcony, and the confusion was the same. At last we left it in the shed.

This owl had doubtless caught the mouse the night before and dropped it down our chimney, so we thought we would keep him a while, to teach him better than to be prowling around our house in the evening. His feathers were very soft and thick, as are the feathers of most owls. Being so soft, and able to fly without any noise, the owls can catch their game on the sly, while the hawks depend upon their swiftness for their food. It makes no difference, when a hawk is on the hunt, whether he makes a noise with his coarse feathers or not; he knows that he can be quick enough to catch his little victims, be they birds or mice.

Well, we kept that screech owl just as long as we wanted his company. He was not a beautiful or an interesting pet. In fact, he would not be petted at all. He did cease to spit and growl at us in a day or two, but he never seemed to return our good feeling or to place any trust in us. He slept or blinked all day, and when night came he was hungry. We taught him to take pieces of raw beef from the end of a long stick, not daring to give it to him from our fingers. He seemed to enjoy this food. But what suited him best was mice.

We caught these mice in a trap in the grain bin, and gave them to the owl only when they were dead. As soon as the bird saw a mouse, he would snatch it quickly and growl at it and shake it, and stick his sharp claws through it, pinning it to the roost. It would take him a long while, sometimes two or three hours, to eat a whole mouse, but he never once let go of it with his claws. He would tear it to pieces, skin and all, and eat the shreds. He seemed to be obliged to rest after each mouthful, going to sleep between times, still clinging to what was left of his supper, and growling if we tried to take it away from him.

After a while he would disgorge or throw up the hard and hairy parts, and then he would take more of his food.

We did not care to keep this owl, and so one evening we let him fly away. He was seen in the yard many times that summer, and the birds always told us where he was, though they never made quite so much noise as at first. They grew used to having him around. He never lighted on so low a bough again, probably remembering how he had been taken the first time.

We did not care if he did choose to live in our yard, for we knew very well his lazy habit of sleeping all day. When he woke up at night we knew the little birds would all be in bed. He was welcome to the mice and the crickets and June bugs.

We are not fond of owls. It is dismal to hear their "too-hoo, too-hoo," as they try to sing. We are glad that they try, for even a poor song is better than no song at all. Owls cannot sing any better than turkeys. In fact, we prefer turkeys to owls for music. Don't you?



CHAPTER XVII.

BIRDS AT WORK AND PLAY.

It sounds very strange to speak of a bird at play. But you can see that birds do play, if you will give yourself the pleasure of watching them. They run along under the hedges and fences at hide-and-seek. They will stop suddenly and scold at one another for not playing "fair"; and they actually play at leap-frog, hopping over one another's backs, never once using their hands.

Sometimes they play "tag" high up in the air, especially the humming-birds and others of swift wing. You can see them playing when they are so high that they look like bumble-bees. Then perhaps they fly out of sight in the blue of the sky.

But the birds seem to do more work than play. It is as if they were saying,

"All play and no work
Makes a bird a mere shirk."

Most father birds help their mates in the cradle making, whenever they can get away for a few minutes from the orchestra. But the mother has the care of everything and does the most and the finest work. We have sometimes thought the mother would do better if left all to herself, the fathers are so fussy and awkward at housekeeping.

Once, in the middle of winter, we saw a father linnet trying his best to coax his mate to build a nest on a little shelf on the upper balcony. He carried straws in his bill, and sat on the shelf, and coaxed his mate to his side, whispering to her, as if he were saying, "How nice this is," and urging her to "Go right to work." We guessed all that, you know, about their talking together, while we stood and watched them out of the window.

But the wise little mother bird just laughed provokingly and flew away. We thought she was laughing, for the father bird looked a little bit ashamed, and held his head down, though he still clung to his straw and remained for a while sitting

on the little shelf. He might have known that was no time or place to build a cradle. It was midwinter, and besides the shelf was slippery.

It is common for a pair of birds to talk about housekeeping, or even to build, a long while before they need the nest. We have seen them hunting for the best spot and chatting about it, as if they were saying, "This will never do," or, "This will be just the right place when the time comes."

We have seen towhees and other birds picking up pieces of sticks and string in November, and carrying them about as if they did not know what to do with their treasures. We should think better of them if they would lay the sticks and twine away in a safe place until they are ready to use them. They seem never to think of that, but drop the things wherever they happen to be.

Birds like to pull at twine even if they have no use for it. They pick at the ends of fibrous bark, as if they valued most highly what costs them the most trouble to get.

A lady we knew was in the habit of throwing out of the window the hairs which came out of her head when she used the comb and brash in the morning. These hairs were caught in a bush, and the birds discovered them. One day her son found a bird's nest near the window, all lined with the white hairs which once grew on his dear mother's head. You may be sure the son keeps that bird's nest among his treasures.

Birds are very fond of hairs of any sort for their nest linings. We have many times placed them within their reach and sight, and they will take them up. They also use chicken feathers, if they are close at hand, and bits of soft paper.

If you want to see something that will amuse you, fasten on a tree or log a piece of old rope that has a ravelled end. Every day in nesting time the birds will tug at that ravelled end of rope, turning somersaults in their hurry, and spending more time chasing one another away from it than in actual work.

When a bird begins to build her nest, she uses coarse materials first, just as a house builder uses beams and timbers to begin with. The bird and the house builder save all the fine stuff for the last. Look closely at a nest when you find one. Pick up an old last year's nest that has blown down. This year's nests do not belong to you. See how there are, first, large sticks or weeds, or rolls of mud. Between the large sticks or weeds there are small, short ones. You can imagine that these pieces all together are nails and boards, and help to hold the whole

nest together. Perhaps these may be all bound together with spiders' web or string, or even paper.

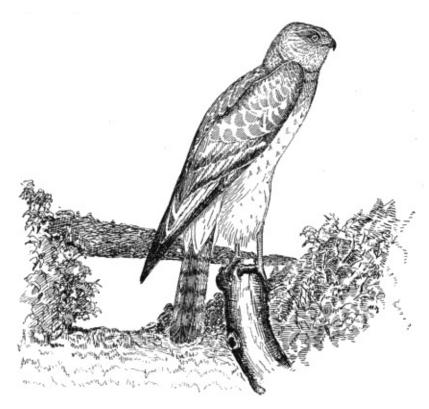
We have seen nests made of nothing but one kind of weed; usually a weed that has a strong smell, like wild sage or yarrow, is chosen. We think that the smell of these strong-scented weeds prevents lice or mites from invading the nest. Perhaps the force of habit or taste has led the bird to select this material. Probably her mother before her made the same sort of a nest, and so she thinks that is about the right thing to do.

Some birds, as the swallows, make mud houses, after the manner of the Mexicans. We often wonder if these people got their idea of house building from the birds.



BARN SWALLOW

Other birds use sticks and cement, as a man does brick and mortar. Some of the sea birds lay their eggs on a bare, flat rock. Even these do not roll off from the rock, for all eggs are oblong and cannot roll in a straight line. We have never seen a perfectly round egg. If you take an egg of any kind, as a hen's egg, and try to roll it down the floor or lawn, you will see what we mean. Then try a perfectly round ball. You will see that it is better that birds' eggs are oblong or elliptical.

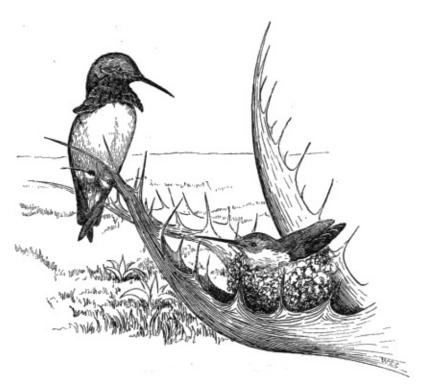


Marsh Owl.

The cactus wren^[16] makes her nest in the middle of a great barbed cactus in our mountain washes or desert places. The tiny Costa's humming-bird^[17] builds its frail nest in the prickly elbow of the low cactus that grows in California all over the barren lowlands. This is probably for safety. A snake could hardly reach a nest which was built in the middle of a cactus whose needles, or thorns, are sometimes an inch long.

[16] Heleodytes brunneicapillus.

[17] Calypte costæ.



Costa's Humming-Bird

CHAPTER XVIII.

SOME OTHER BIRDS AT WORK.

Not many of the birds in our yard are quarrelsome. They seem to respect one another's rights, especially at nesting time. It is not so much our business to tell bad or unpleasant things about birds, as to tell what is pleasant and what will make you love them. That is why we spoke a good word for the shrikes and the hawks and the owls.

If a pair of birds have selected the limb of a tree upon which to build a cradle, they are not often driven from it by other birds. It seems to us that when a sparrow has put a piece of twine over a bough, it is as if she had written her name on it or got a deed for that particular bough.

If you should wish to tame a pair of birds that are building their nest where you may watch them, wait until the nest is finished or until the first egg is laid. Sometimes it is better to wait for the little birds. A bird will desert an unfinished nest if she suspects you are watching her. But she dislikes to throw away all of her labor, and will often lay her eggs and hatch her young while you are looking at her, rather than begin her nest all over again.

If you take just one egg from the nest of some birds, leaving all of the others, the parents will never go to it again. There are other timid, delicate birds who will leave their nest if you just go up softly and peep into it. The parent birds may not be in sight, and you may think they will never know. But they have been in hiding and have seen you steal up, and they will desert the place and the nest. Only a few birds will do this, however, and these are mostly those which live far away, in a quiet dell or on a hill where people seldom go.

We feel quite sure that we can tame almost any home bird at nesting time. A goldfinch^[18] has just built her nest in an apple tree near our house. We have tamed the mother bird so that we can smooth her feathers on her neck and breast with our fingers while she is sitting on the nest. At first we took leaves in our hand and touched her with them. She did not care for the leaves; they were all about her in the tree. Gradually we dropped the leaves, until she was not afraid

of our hands.

[18] Spinus psaltria.

We wished to take a photograph of her, and did so one very warm day. She sat in the heat, with her wings lifted to let the air through, and her bill parted as if she were panting. The father bird comes to feed her on the nest, just as their young are fed, with his bill in hers. These finches are nurslings, you know, and are fed on prepared food.

The oriole^[19] is a very interesting bird with us. She chooses to hang her hammock or cradle beneath a festoon of thick leaves on a swaying bough, or from a drooping twig. Here she prefers a broad green banana leaf or the great leaf of a fan palm. These leaves are good shelter from the sunshine.

[19] Icterus cucullatus nelsoni.

The banana leaf is about five feet long, and doubles on its midrib like a book cover during the middle of the day. At night and early in the morning, when it is cool, the leaf opens better, and it is then that the bird works at her hammock. When the pouch is finished, the leaf is kept from doubling quite up and is like a sharp roof over the heads of the young and their mother. The banana leaf is constantly waving and trembling, even when there is scarcely a bit of breeze.

Another favorite place for an oriole to build her hammock is the under side of the fan-palm leaf. You will wonder how a bird can weave a thread in and out of a leaf, when she has no fingers or needles. We have watched an oriole do this many a time, and this is how it is done. She takes a thread in her beak and pushes it through the leaf from one side. Then she flies to the other side and pushes the same thread back through another opening in the leaf which she has made with her bill. Thus she weaves a kind of cloth pouch on the under side of the leaf, flying back and forth from the upper to the under side. The pouch or hammock is lined, and there the eggs are laid. You can see the mother's head sticking out from the nest, but if she knows you are watching, she will draw her head out of sight, so you will see nothing but the nest.

The thread most used by orioles here is the fibre which ravels from the edges of the palm leaves. Where such thread is not to be had, they use twine or string of any sort.

Young orioles meet with many dangers before they leave the hammock. Sometimes their feet get tangled in the thread or horsehairs of which the nest is

partly made. When the little helpless things attempt to fly out, they are sometimes caught by the toes, and there they bang. We have rescued several which were caught this way.

It seems strange that a bird which can build so beautiful and fine a nest of threads does not know enough to pull the strings off from her baby's toes when it is caught in this way. They may do this sometimes, but we have never seen them do anything but fly about in a helpless way, chattering as orioles do.

Orioles keep no secrets to themselves. They are "tell-tales," and keep up a constant chat among themselves and at intruders. They are different in this respect from some other birds, who are as quiet as mice, never whispering a word as to where their nests are, and deceiving you, if they can, by limping away as if they were hurt. Such quiet birds will raise a nest full of birds and be off while you are wondering where they are.

We do not have chimney swifts in California; but we lived in New England once, and we recollect very well what a racket they used to make in the chimneys. Sometimes the nests fell down into the fireplace, and then what a commotion!

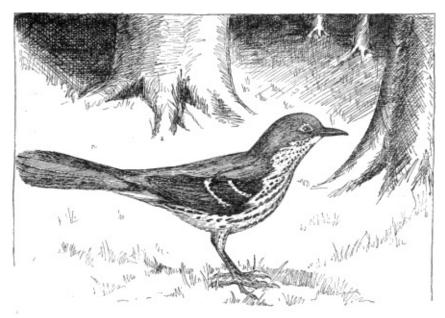
Some swallows choose to build under the eaves, and in caves and tunnels, and on the under side of bridges, or in crevices of rocks. We have often wondered that a bird mother can tell her own nest among so many that look just alike. We have stood and watched the barn swallows, and felt sure that they count, "One, two, three, here's my nest." How else do you suppose that a mother can be sure that she has come to the right nest?

We have seen mother birds cry and call loudly, as if for help, when the babies have fallen out of the nest. If you pick up one birdling and place it back in the nest, the mother takes a quick glance at it, and then goes on calling as before. She will not stop until she sees every one of them safe back in the cradle. This makes us think that some birds do count.



CAT-BIRD.

In Tennessee, where we once lived, the cat-birds and brown thrushes used to build their nests in the porches and vines above the door. Sometimes we would take the young birds from the nest and keep them in the parlor for company, taming and feeding them, and allowing them to flutter about on the floor to amuse strangers. Perhaps we would have them in the house for an hour.



Brown Thrush.

When we opened the door to take them home again, the old birds would be standing close by, like dogs whose masters are in the house. When they saw us, they would set up such a scolding that we felt quite ashamed for having kidnapped their children even for so short a time. They grew used to our ways before the summer was over, and would soon let us take the young without so much ado.

Small birds, such as the goldfinches and humming-birds, use a good deal of spider's web in making their cradles. This is very soft, and when many strands are used together it is very strong. This web is used to hold the mosses and plants down in place. When you see the bushes and hedges all covered with web in a damp morning, think of the little bird house-builders. Watch, in some quiet corner out of sight of them, and you will see the mother humming-bird or goldfinch dart up to the glistening webs and examine them in turn, just as a lady who is out shopping examines the different goods in a store.

Madam Bird flies down to a small web, taking a bite at it with her slender bill, as if she were feeling of it with her fingers.

Then she flies off to another spider's counter of goods and pecks at another web. When she has found what suits her, she will take several bird yards of it home with her.

In the nest of our goldfinch in the apple tree, we see some spider web binding the grasses together, but the nest itself is lined with horsehairs. We have one bay horse and one black horse. In this nest lining there are hairs from the tails of both horses, woven round with great care in a striped way, that looks as if the bird had thought about how it would look, the red and the black together.

CHAPTER XIX.

A PET HUMMING-BIRD.

Humming-bird mothers are very tender of their young and will seldom go out of sight of them. We have ourselves picked the mother from the nest and let her go, when she would immediately return to it.

If you see a humming-bird sitting on a twig napping, just clasp your hands behind you and go straight up to the bird. You can almost touch it with your face, but if you put out your hand the bird will dart away. A hummer will alight on the flowers you may be carrying, if you remain perfectly still. These birds seem to notice movement more than form.

Humming-birds, like many others, do not seem to notice a person if he is going toward them in a straight line. It is "sidewise" movement that frightens them.

We have known a humming-bird to "play 'possum," though we are told, by some one who ought to know, that it was really frightened almost to death.

This bird had come in at an open window for some flowers left on the sill. On leaving the room, by some mistake it flew up to the ceiling instead of going out at the window. The ceiling was high, so we took a long broom and chased the bird, catching it on the wisp end and bringing it down. It did not stir, though we were sure we had not hurt it. We took it in our hands, and it lay on its back with its eyes shut, as if it were indeed dead. Then we carried it to the garden, feeling very sorry. Suddenly one black eye opened, and then the other, when, in a flash, the little bird was off.

One day in spring a certain professor whom we know, who is very fond of hunting toadstools, caught sight of what he felt sure was a rare one on the limb of a live-oak tree. The heart of the professor beat with joy, for he would rather find a new kind of toadstool or lichen than a gold mine, and he put out his hand to pick this new one off. It moved, and he looked at it. It was a baby hummer, just fledged, and very delicate. It did not know enough to be afraid of him, and cuddled in his hand as if it were the nest.

He knew how much we like birds, and so the professor put the baby in his pocket basket and brought it home to us. The bird was unhurt and as free from fear as a real baby. Its face looked like a baby face, as the faces of all young birds look, innocent and sweet, and full of a helpless, not frightened, expression. You can look at the pictures and see that this is true.

To feed this bird, which seemed hungry, we mixed some sugar and water. It would not open its bill, so we held the sweet in a spoon and dipped the beak into it. It tasted, and then put out its tongue and lapped some. This very slender, thread-like tongue was long and black and very quick of movement.

Every hour we fed it with this sweetened water, and it came to know the spoon by sight and to look for it when we were coming. We moistened our lips with the syrup, and the little thing would move towards us, placing its bill on our lips and thrusting its dainty tongue all around in a way that was very amusing.

We did not know as much about humming-birds then as we have learned since, or we should have fed it as often as every fifteen minutes, and used honey in place of water.

[Transcriber Note—Do NOT feed Humming-birds honey. Honey does not have the same chemical composition as floral nectar and is more difficult for Humming-birds to digest.]

It loved to perch on the edge of a wicker basket, whose rim was so easy to cling to. It would shimmer in the sunshine like a piece of silk, no larger than "a great big bumble-bee."

In a few days it could fly all about the room, but it could not fix its toes on or around anything, and would fall helpless to the floor or drop behind the pictures.

It was cold at night, though we covered it with warm things, and often we would warm it in our hands before morning. It needed the warmth of its mother's breast.

It learned to drink cold water, and to expect it after each meal of syrup, as if it wanted to rinse its mouth. It lapped up the water like a kitten, its queer, frail tongue looking like a bit of black thread in the clear water.

We tried to get it to take tiny spiders, which we hunted in the garden, but it refused, and did not live with us very long.

We think we ought to have given it a little milk to take the place of spiders, which it must have missed. We shall never try to have another pet so frail as this; these birds seem too delicate to touch. Our fingers are not light enough. We have a friend who kept a young hummer for three months, and they are said to live even longer than this when in captivity.

Of all our bird friends, we think the humming-bird the most wonderful and interesting. This perhaps is because it is the smallest and wisest of all the birds we know.

CHAPTER XX.

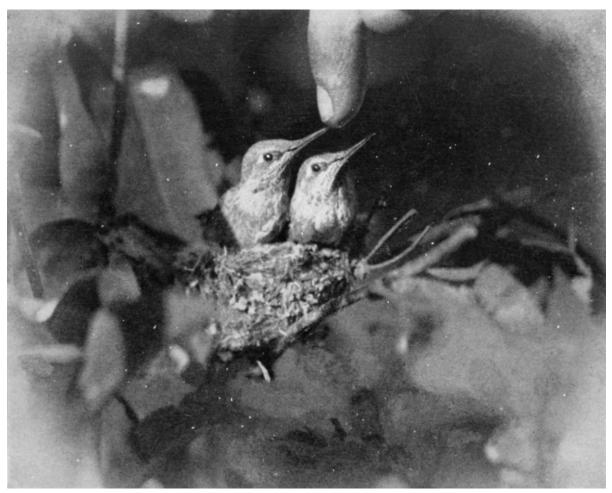
HOW WE TOOK THE HUMMING-BIRDS' PICTURES.

There are seventeen or eighteen kinds of humming-birds in the United States. Here in Southern California we have five of six. The largest of these is the Anna's Humming-bird. [20] It was called "Anna's Hummer" in honor of a lady of that name.

[20] Calypte annae.

This bird measures about four inches from the tip of its beak to the end of its tail. The female is a mixture of gray and green underneath, with a shining green back. The male has a throat and head of changeable bright colors, which shimmer like some metallic substance as he turns about in the sunshine.

The bill of these birds is five-eighths of an inch long, and the tongue is much longer. With this long, extensible tongue it can suck the honey from the deepest flowers. It may be seen about the petunias and the honeysuckle and the nasturtiums. There is plenty of sweet at the end of these trumpet-like flowers which the bees cannot reach with their shorter tongues.



WE LIKE SUGAR, TOO.

Page 100.

It was the Anna's Hummer which we photographed last year on purpose to put the pictures in this book, that those who do not have humming-birds nesting in their yards, or where they can study them, may see just how they look.

We have no snow storms here, but in their place are long, cold rain storms, with many days of bright, warm weather between. Flowers bloom all the time, and the humming-birds see no reason why they should not attend to their housekeeping. It is as if they thought, "Now this storm is over, we will build our cradles," never once thinking of the possibility of there coming another storm before the birdlings are out of the nest.

We were walking about in the yard one bright morning late in December, when a humming-bird poised herself above some pampas grass and stole a single tuft. This pampas grass sends up its long spikes of plumes in midsummer, and we always leave a few of them on purpose for the birds to get for their nests. They are very dusty and weather-beaten by winter, but that makes no difference, for the little separate tufts are good for crib beds.

When we saw the bird at the pampas grass, we knew that she was nesting, so we watched her. She flew to a low shrub near the path and left the tuft. Then she darted to a cypress hedge where there were plenty of spiders' webs. She gathered a bill full of this web and returned to the shrub. In a moment she was off to the pampas grass again, and we stole up to look. Not three feet from the ground was the beginning of the smallest nest. As yet it was a mere filmy platform set where two twigs joined hands, beneath a cluster of bluish-green leaves.

The bird was shy and would not return while we were in sight, so we went away and waited, knowing that we must be very careful not to disturb her if we wished her to finish her nest.

Taming this little bird was the work of many days. At first we sat perfectly still on the door-steps, not ten feet away. She saw us even there, and would wait in the trees above for a long while before she was quite sure we would not harm her. In a day or two we could sit on the steps or move about, but not too near. Before the nest was as large as a walnut the bird allowed us to watch her a few feet away, provided we stood motionless. She was indeed a delicate creature, winding the web around and around, so that the pampas tufts should be thick and firm.

On New Year's day the first tiny oblong white egg was laid. It was a gem, the size of a navy bean, in a nest-setting of silver-gray softness. We clasped our hands in delight at this beginning of what would be living rainbow tints. In four days its mate was laid by its side. These birds always lay just two eggs. Every day the mother bird was adding more web and lichens and pampas tufts, turning about gently and rapidly to shape the nest around her.

We have never seen any birds except the hummers who add to their nests during incubation and after the young are hatched. On the twentieth day of January the first egg was hatched. We stole up to look, and there at the bottom of the small cradle was what looked like a tiny black grub, perfectly bare. We imagined the mother was very happy and thinking in her dear little heart how much the baby resembled its father.

The father, as is the custom of the males of these humming-birds, was away

in the foothills sucking sweets from the mountain flowers, and leaving to his mate all the care of the household. It seems very selfish of him, but the mother bird may be very glad to be without him. What does a father humming-bird know about taking care of such tiny babies?

One day later than its mate the other egg was hatched, and there were a pair of black, bare grubs. They had no bills, except a tiny point in the middle of the mouth, which they kept open in a coaxing way. They could move nothing but their heads, and their eyes were shut tight. How carefully the mother fed them. Many a time, looking on at meal-time, we were tempted to caution the mother lest she thrust her bill a little too far down the small throats. She winked her black eye at us, while we stood with uplifted finger, as much as to say, "Don't be afraid, I have nursed babies before."

As the birdlings grew, the nest had to be enlarged, and it took every minute of the mother's time to keep the household matters in order. In a few days down began to appear upon the birds, and then a shimmering green on the backs, like that of the mother's dress. Young male hummers do not get the bright head and throat until the first moult. When the birds were thus clothed, the mother did not seem to think it necessary to build the nest up about them any higher, so the birds were crowded out gradually as they grew, until they were obliged to sit on the edge, a pair of the sweetest twins one ever saw.

A storm came down from the mountains and surprised the faithful little mother, but she sheltered the babies as best she could until we came to the rescue with a gingham apron, which we pinned in place above the nest, making a complete shelter for all. We kept this apron in place for a week, or until the storm was over. People passing by must have thought us very queer housekeepers to spread our washing in the front yard, but we did not stop to explain.

By this time the bird had grown so trustful that we could do almost anything without scaring her. We fed the young with syrup on the ends of our fingers, while the mother looked on astonished. They would put out their fine thread-like tongues and look at us from their tiny black eyes, as if thanking us. Their bills had grown out until they were quite respectable by the time the babies sat on the edge of the nest.



LEAVING THE NEST.

Page 104.



Anna's Humming-Birds.

As soon as the mother became tame enough, we took the pictures, as you see them. While we stood at the nest, she would fly all about our faces and look at our ears and eyes, and buzz at our hair in a very funny way. Once we bent the twig from its place in the shrub, and held it close to our faces, and the mother fed the young, brushing our cheeks with her gauzy wings. Then we tied it back to its old place when the mother had flown away. She came back and flew in our faces, as if she expected to find the babies there. Not finding them with us, she went back to the shrub as if nothing had happened.

It was a wonderful thing to have this shy bird so trustful and willing to have her photograph taken.

The older of the two birds left the nest first, and we had hard work to get him to be still enough for the last sitting. The mother came down and sat between the two birds on the twig, and looked at the bird who wouldn't keep still, as if she were scolding him.

She seemed just like a real person taking her baby to the artist's to have his picture taken. Once two strange old hummers came when we were taking the pictures, and bothered us a good deal. They made our mother hummer nervous and cross, and she drove them away. It seemed to us that these birds wanted to

have their picture taken too, but we could not quite catch them, because they were not well enough acquainted with us and the camera.

One day the babies left the old battered nest and flew to the trees. The rim of the nest was torn and worn away by the feet of the mother as she stood to feed the young. We noticed that for a few days after they were hatched she fed them every fifteen minutes, but as they grew stronger she gave them their food only once an hour, or at even longer intervals.



MOTHER BIRD POISED ON HUMMING WINGS.

Page 106.

After they had flown, there came a hard storm, and we went out in the morning expecting to find the babies dead on the ground. But not so; there they sat in the sunshine above our heads, as safe as could be. They remained about in the yard for two or three weeks, when they disappeared, no doubt going to the foothills to join their father at sucking sweets and flitting among the vines.

CHAPTER XXI.

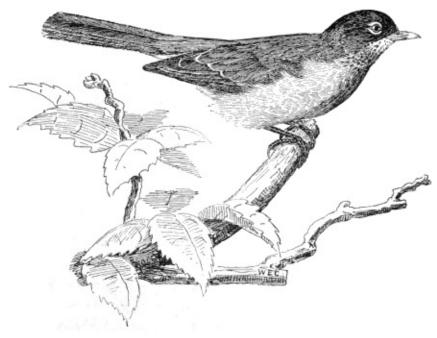
OUR ROBIN REDBREAST.

Almost every child knows the robin redbreast. He is a great favorite wherever he goes. We have him with us in Southern California only in winter time for a few weeks after the rains have come. When our ground is mellow with moisture, and the angle-worms have worked their way to the top, leaving little loose hillocks all about the yard, then we look out for a visit from the robins.

They come in companies great enough to fill the tree-tops, and their constant song reminds us of old times when we lived in the New England States.

Robins are "water birds" in a way, although they do not swim. They are perfectly at home in wet grass or foliage, and even in a rain storm. They never seem to have any use for umbrellas.

Once, while on a visit to some friends in the east, we found two baby robins which were blown from their nest in a storm. We fed them with bread soaked in milk, and fresh beef, and they thrived. We shut them in an empty room upstairs, and they soon learned to look for us and to know our step. They would fly to the crack of the doorway and squeal when they heard us coming. Before we dared open the door, we had to push the birds away, for fear they would be caught and hurt.



ROBIN.

When we were ready to start for our California home, we put the robins in a cage, taking as much food as we thought they would need on the journey. In a day or two the meat gave out, and they grew tired of bread and water. They coaxed constantly for beef, so we asked a porter on our car to get some for them.

By this time most of the passengers had become interested in our robins, and a gentleman offered to keep them in beef for the rest of the journey. He would go out once a day, when the train stopped long enough, and buy some beef. Our pets came to be quite an attraction in the car, and everybody was anxious to do something for the little travellers.

We took the birds to the dressing-room each day to clean the cage and to give them a bath. We washed them one at a time, in our hands, holding them under the gently flowing faucet. At first they objected, but they soon grew to like it.

During the first year they never sang a note, for their unmusical squeak could certainly not be called singing. The second spring we gave them a large cage in the yard, that they might make the acquaintance of other birds. In a short time an old mocking-bird came and gave them music lessons.

The teacher would twist his toes around the wires of the cage, in this way

holding himself close to the birds. Then he would twitter softly, until the young birds had learned to respond and to twitter too.

When at last the robins did have a song, it was a mixture of robin and mocking-bird notes. They did not speak pure robin all that year.

After they were grown-up birds, the mocker who had taught them music took a great dislike to them. This was very strange, for he had been so fond of his little pupils, dropping berries down through the cage wires, and calling them all sorts of pet names in his own language. Now he would scold them and peck at them and scare them, until we were obliged to cover a part of the cage.

In a year or two the male robin got out of the cage and flew away. We could hear him far out of sight in the trees, but he would not come back, though we called to him in our kindest tones. He was out all night, and we supposed he was dead, as he was at the mercy of the mocking-birds.

What was our surprise early in the morning to find him on the hitching-post near the house, with his bill wide open, screaming for his breakfast. But he would not let us put our hands on him.

Then we thought of a plan to catch him, the same by which wild animals are sometimes caught. We scattered some crumbs from the post where he sat to the door of the cage, and Robin went to picking them up, of course, being very hungry and not thinking about the consequences. He followed the trail of the crumbs until, before he knew it, he was safe within the cage and the door was shut.

Once again he got away from us, but we knew he would come back at mealtime, if the shrikes and the mockers did not find him. Birds which have lived for a while in a cage seem to be perfectly helpless when out at liberty, not knowing how to find food for themselves, and dying of hunger in the midst of plenty.

Sure enough, at supper time Robin came back, clamoring for his share. There was a soft, moist place in the garden where we were in the habit of digging worms for the robins at night. We took the cage and set it down by this place, with the door tied back.

We went to work with the spade, pretending not to notice the little runaway, who hopped close to us and screamed at his little innocent mate in the cage. We threw some worms in at the open door for the bird on the inside, who ate them,

taking no notice of her companion on the outside.

Suddenly the outsider hopped to the hole where we were digging and tried to grab the worms before we had time to pick them up. But we cheated him, understanding his little game, and dodged past him with the coveted worms. He, standing on tiptoe, danced about in the funniest fashion, still trying to snatch the worms. All at once, taunting him with a good long-worm, we threw it past him into the cage. Away the bird ran after it, and the little fellow who loved so well to "play hookie" was caught once more.

CHAPTER XXII.

MORE ABOUT OUR ROBIN.

When the robins were two years old, we noticed that they were picking up straws from the bottom of the cage, and so we "took the hint." We looked all about to find something that was the shape of a nest. We were tempted at first to put a little open-work basket in the cage, but we remembered an experience which we had some years before, and did not use the basket.

The experience was this. We hung a tiny basket in the canary's cage, and the birds made a thin nest in it and hatched their eggs. The male had been very active, helping his mate in all the ways he could think of, and he thought he would mend the nest one day. So he began to peck at the string through the meshes of the basket, reaching up from the bottom. We did not think he was doing any harm, till we noticed what looked like a bird's foot hanging down through the bottom of the basket. What was our astonishment to find that the old bird had pulled off the legs of the young birds, stupidly thinking that he was tugging at the twine.

Of course we did not put a basket in the robins' cage, but we found a round butter mould, which answered just as well. The birds were very much pleased with the butter mould, and began carrying straw and mud which we gave to them, until they had quite a respectable robin's nest. We do not know whether wild robins would nest in a butter mould, if we should fasten it in the crotch of an apple tree or swing it from the branches, but it would be quite worth one's while to try, if one is living where there are wild robins.

One morning we found a blue egg in the nest. The birds were surprised. They hopped on the rim of the butter mould and looked at the egg and chirped at it, and then the male bird hopped in and sat down on it. We clapped our hands and called to the whole family to "come and see."

But what do you think that naughty bird did? Just as we were all feeling sure of his good sense, he jumped suddenly out of the nest and then back again. Then he began to scratch with both feet as fast as he could, till the egg went out of the nest and lay in fragments on the bottom of the cage. We expected to see his mate resent it, but she took no notice, going on pecking at a peach as if nothing had happened.

"It was an accident," we said, ready to excuse our pets. The days went by, and seven blue eggs shared the fate of the first one. The birds took turns at scratching them out of the nest, as if it were great fun. We felt badly, of course, and scolded them. But they only stared helplessly at us, and did not explain the secret about those eggs.

When the robins were three years old, the male began to be sick. He had "fits" or spasms of some sort, whirling around on the floor upon his back, where he would lie as if dead for a few minutes. Then he would jump up and begin eating, as well as ever.

These attacks grew less severe, and in a few days the bird got well. His mate had taken excellent care of him, begging him to eat something right in the middle of his fit, and flying about him just like a nervous little woman. When she had nursed him back to life and health, she was taken with the same disease and died in a short time. We asked a doctor what he thought it was, and he said he "guessed it was the grip."

The little widower did not pine away and die from grief; he was too sensible for that, and life was very pleasant to him. He took to singing with all his might as he had never sung before. For four hours in the early morning he never rested his bulging little red throat, not even to eat his breakfast. The old-fashioned robin notes, which he had made believe he never knew before, came bubbling out in a wild glee that made the neighborhood ring. People inquired all around to know where that robin was.

He was very fond of spiders, and when we took the broom in our hands he watched us closely. The large gray house spider was his favorite.

We think a good deal of these spiders, and were very sorry to give them to the robin, but we were afraid he would die if he had none. In whichever room we were when we found one of these spiders, we had only to call out, "Here's a spider, Robby," and the bird would chirp his answer, hopping to the corner of the cage nearest the door. Here he would wait for us to give him the insect. If we found a bug or a worm, we had but to call out, "Quick, Robby," and he would dart nervously from side to side of his big cage in his eagerness not to keep us waiting. He would take berries from our mouths, many a time giving our lips a

tweak as if he did it on purpose. Then he would stare at us with his black eye full of fun.

A Chinaman with a vegetable cart came to our house three times a week, and Robby grew to know him and his wagon. He knew the sound of the wagon before it was in sight. He was always afraid of strangers, but this Chinaman he loved and trusted. He would hop to his cage door to meet him, and open his bill for the strawberry which "John" never forgot in berry season.

He was fond of meat of any kind, taking it salted and cooked or raw. But he would never touch bird flesh of any sort,—chicken or quail or turkey,—though we many a time ran to the cage calling, "Quick, Robby" just to surprise him. He would look disgusted and turn his head away, as if to say, "No, thank you: I am not a cannibal." He would not taste of sugar, but was fond of gingerbread and cake.

During our long dry season of many months, Robby had a way of his own to keep cool and moist. His bath was an oblong china vegetable dish, which held water enough to cover him at full length.

When the days were warm and dry, and Robin somehow missed the rain which he had never seen in summer time, he would hop into the bath and sit or lie down. The water covered him up to his ears; and there he would sit for an hour at a time, blinking and dozing, as if he were a real water bird. He would take food from our hands, too lazy and contented to stir out of the water.

When the tourist robins came in winter, we imagined our pet would remember his mate and be anxious to join the birds. But he took no notice, caring not so much for the robins as for the brown towhees who had always kept him company at the back door.

Perhaps he thought his house was small, and if all "his folk" were intending to spend the winter with him he would be crowded "out of house and home." He was not hospitable to them, nor had he "rooms to rent." He not even answered them when the tourists chirped him a last good-bye and went away in early April, after they had eaten up all the pepper berries.

Well, the longest story has an end. When our robin was in his fifth year he died, and we buried him beside our little humming-bird under the fig tree. The bees in the orange blossoms all about him sang him a dirge, and a royal mocking-bird carolled away with all his might.



CHAPTER XXIII.

GOING TO BED AND GETTING UP.

As we told you before, birds do not live in houses or sleep in bedrooms; though in some parts of the country they build their cradles in little bird-houses and boxes or anything of the sort which you will give them. But here we have never succeeded in making any of them occupy a place which we have prepared for them, though we have made the prettiest little houses, and nailed boxes in cosey places. The western race of the house wren nests with us; so also does the bluebird. But these birds have not become civilized and prefer to stay in the mountains and far-off places.



Western Bluebird.

Birds never call to one another to "Be sure to leave the window up for fresh air," and they do not try to get more than their share of the blankets, as some

children do. Each bird carries his bedding about on his back, like a tramp, and he takes the first warm, sheltered nook he can find for his bed. Some birds appear to go to the same place to sleep every night. We suppose they feel more at home in one spot, if they have not been molested there. When we find a particular spot where we know the birds are in the habit of sleeping or roosting, we are careful not to disturb the bush or tree.

Some birds sleep with their heads all covered up with the bed-clothes, as if they were afraid, like foolish children. Perhaps they like a warm night-cap, though we do not see how they need one with such a thick head of hair as they have. We call it "tucking their heads under their wings."

It is a queer fashion to stand or squat on one foot all night, instead of lying down like other people. We suppose they use one foot at a time, so that the other may be rested. You have noticed that anybody who must stand for a long while usually favors one limb or foot, holding it up a little at the knee joint, and after a time changing to the other. Try it yourself and see.

One very odd position in which some birds sleep is upright on the bark of a tree trunk, clinging to the wood with their toes, and propping themselves up with their strong, pointed tail-tips, as the flickers and some of their friends do.

Going-to-bed-time and getting-up-time are happy hours with the birds. About sundown you will hear them saying, "Just one more twitter," "One more worm, if you please," or, "One more flight to the highest tree."

While you are watching them in the soft twilight, there is a sudden hush and not a bird is in sight. If you have not been paying close attention, with your eyes wide open, it will be impossible for you to tell what has become of the birds, they go to bed so quickly and silently. Not a sound will break the stillness, unless a merry mocking-bird wakes you out of your sleep.

These mocking-birds sing to us all night long at some parts of the year. You know these birds came by their name because they deserve it. They mock or mimic every bird they hear, including the hens and turkeys. We have wondered why they do not talk as well, but we have never known them to.

One mocker in our yard gives us the postman's whistle every afternoon an hour before it is due. Strangers rush to their gates, thinking their mail has come, while the mocker laughs at them from the tip-top branch of a eucalyptus tree, seventy or eighty feet above them.

If you have just come to California, you are likely to be waked up in the middle of the night by the sound of your pet chickens peeping, or the turkeys crying as if in distress, and you imagine all the fowls in the coops are being carried off.

Perhaps you will snatch a broom or an apron and run out quickly, sure of finding the marauder. From the top of his tree, safe out of your reach, that little rascal of a mocker will "peep" again, and then you will understand that it is only one of his jokes. Often they sing beautiful songs by the hour, and we lie awake to hear, laughing at the racket, or holding our breath to catch the last note of some wonderful melody.

Besides the mocking-bird you may hear the owl, though you cannot be quite sure that it is not the mocker again. In the dusk, when it is just light enough to see a little, you may catch a glimpse of the "Poor Will," darting about for his supper among the belated gnats and flies.

When this bird came to California he left off saying "Whip Poor Will,"^[21] and so has but two notes. "Poor Will" is not whipped in this beautiful land.

[21] Phaenoptilus nuttalli californicus.

One will have to get up very early to see the fun among the birds in the morning. A chirp in the twilight, the breakfast bell ringing from the throat of the first bird up, and then how astir are the trees and the bushes, and the whole yard or field! It is impossible for you to tell where the little songsters came from so suddenly, just as it was impossible for you to tell where they went to sleep the night before.

If there is a tub of water by the pump, the rim of it will soon be covered by the birds; or, better still, if there is a leaky hydrant, or a spring in the berry patch, or a puddle in the orchard, there you will see what is sure to make you laugh.

The swishing and the diving and the twittering and the dressing of the birds, and the flying particles of water like a shower bath, are enough to make you glad that there are birds alive.



Whip-poor-will

Let lazy people lie in bed on a bright morning. They will never know what fun they miss, even though they may read about it. It is better to see a fine thing for yourself than to depend upon what other people have to say about it.

By the time ordinary people are up, the birds will have settled down to the business of the day. Their dresses and coats are brushed, and their hats and bonnets are on "straight."

The drip, drip, of the hydrant, or the babble of the brook do not tell what they saw an hour ago. The old sun, looking down steadily in your face, never hints at sights that made him smile so out of the corner of his eye when he first got up at call of the birds.

It is a very odd thing that the birds have to wake the sun every morning in California. Look about you early and see how it is where you live.

"Get up, old Sun! get up, old Sun!" they all scream at once, and they keep right on making as much noise as they can, until the lazy old fellow is fairly out

of bed. Tell your friends, if they do not believe this, that they and old Sol himself had better take to getting up earlier in the morning.

That is a queer old proverb, "Early birds get the worms." You have all heard it, and it tells the truth.

Did you ever see the ground all covered with tiny little mounds of fresh earth in the morning when it is damp? Angle-worms do not like the sunshine; they will die if exposed to it. So they come up to the surface of the ground in the night, while we and the sun are asleep, just to get a bit of fresh air and to look around the world. If they do not hurry back to their home in the ground, they will get surprised by the "early birds," who help themselves to all the worms they want.

That is a good proverb for the birds and the worms, but it has another meaning for us all. "Early birds get the worms" means "If you want to see pretty things, and hear fine music, and have a good time, you must get up early in the morning." So if you would see all the bird-fun in your yard, you must be up and out as soon as there is the least bit of light, or you will be too late.

CHAPTER XXIV.

MRS. TOWHEE PROPOSES A GARDEN PARTY.

"Let's give a garden party," said Mrs. Towhee to Mrs. Phœbe; "it is lovely weather, and we haven't had a garden party for ever so long."

"Good! let's do it," answered Mrs. Phœbe. "You go and give out the invitations, while I get things ready."

"There is a new family up in the eucalyptus house," said Mrs. Towhee, calling her friend back. "They are little mites of people, almost as small as the Hummers. I wonder if it would be proper to invite them to our party. They are strangers here, and no one I have seen ever heard of them before. You know we ought to be careful about the new people we meet."

"Well, I don't know," the other said, smoothing her slate-colored breast. "Ask Mrs. Mocker; she knows everybody."

So they called to Mrs. Mocker. "Do you know that new family up in the great high house? They must be fine people to move into such a handsome place. The Oriole family have rented that house for years."



PHŒBE.

"Oh, I know them," Mrs. Mocker said; "they are Mr. and Mrs. Bush-tit from over in the mountains. They never lived in our city before. They belong to the great Tit family, and their name means a Tit-in-a-bush." Then Mrs. Mocker looked very knowing and put on airs, as she always does. She knows that she is acquainted with everybody, and she is proud of it.

Mrs. Towhee and Mrs. Phœbe nudged each other. Then they asked Mrs. Mocker if she would "introduce the new neighbors at the party."

Mrs. Mocker agreed to do this, and then Mrs. Towhee went away to invite all the people, and Mrs. Phœbe got the garden ready. She swung on all the bough-swings she could think of, to see if they were safe; and she hunted up all the nice nooks and corners to play hide-and-seek in; and she tested the food which was sent in to see if it was all right. Then she went upstairs into the top stories of the tree-houses and waved her hand to all her bird friends.

It was a busy day among the bird people. They washed themselves, and combed their frizzes, and cocked their hats, and trimmed their bonnets, and flirted their coat-tails, and fixed their best trails, and took especial pains to have their feet clean. They made their nails look neat, too; strange a bird should think

of that. But birds are ladies and gentlemen, you know.

"Is my gorget all right?" asked Mr. Hummer of Mr. Sparrow.

"I don't know what you mean by your gorget," said Mr. Sparrow.

"Why, it's this shining patch I always wear under my throat. Really it is a diamond scarf-pin which has always been in our family. It is an heirloom. Rather large, isn't it? but all the gentlemen in our family wear them, and that is what makes the fashion, you know." Then the vain young hummer turned his head all about in the sunshine to make his gorget shimmer.

"Oh, I see," said Mr. Sparrow. "How do you like my new garden hat? You see it is striped,—two black stripes and three white stripes. It is very costly, and I hope it will wear a whole year."

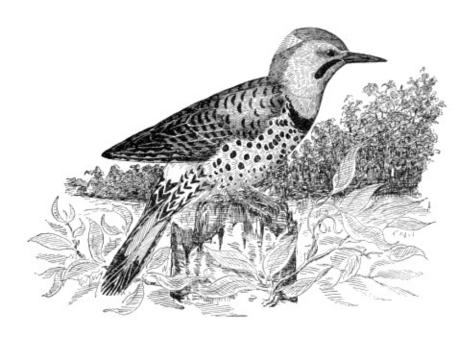
"Why, that is a beautiful hat," answered Mr. Hummer. "Do you suppose those new people up in the big house will come to our garden party?"

"Oh, I hope so," said Mr. Sparrow. "And there are some more new people here, tourists, just passing over the Southern-Pacific-free-to-all bird route. They have stop-over tickets, I understand, and I mean to ask Mrs. Mocker to invite them all. She likes to get acquainted with strangers for the chance of mocking them behind their backs. I can't help liking her, though."

"Tut, tut," said Mr. Sparrow, "it isn't right to gossip about one's neighbors." Then in a low tone he added, "If you don't know anything good to say about a person like Mrs. Mocker, it shows you do not know her very well."

Mr. Mocker heard what they were saying about his wife, and he fell to mimicking them in a low key till the gossipers all flew off.

Just then a red-shafted flicker called to his next neighbor, the humming-bird, with a loud, harsh cry, which so frightened the little hummer that he dropped straight down from the bough he was sitting on, right into the lap of a rose that happened to be spreading her skirts below.



FLICKER.

"You needn't be afraid of me," said the flicker, "that is my natural voice. I was going to tell you how I scared an old lady in the white house yonder. I flew up to the gable under the eaves and began hammering away with all my might on the house-side. You know my hard, stout bill is my hammer. It went 'rap, rap,' just like a man with a hatchet.

"Out came the old lady, and she looked all around the house, thinking to see a burglar, I suppose, and then she went back and locked the door. Soon I began to hammer again. She came out, and this time she looked straight at me and said, 'Shoo, you old bird!' Of course I flew away. All I wanted was to make a hole in the roof over the attic, so I could have a warm place to sleep in this winter."

"I don't think it was kind of you to scare an old lady," said the hummer, sitting still in the lap of the pink rose. "That is the same lady who left her pampas plumes standing in the yard when other people had cut theirs down, on purpose that my wife might have the feathers and tufts to line her nest with. They are splendid to make a cradle of, they and the spider's web. It was that same old lady's daughter who put the umbrella over our nest in the rain storm.

"That young lady thinks she can catch me. I go and sit on a low bush and doze in the sunshine, showing off my gorget as well as I can, when along comes the young lady. I blink away, and she thinks I am fast asleep. As long as her hands are behind her I know I am safe, and I let her get close to me. But the

minute she puts out her hand to catch me, I am off, and you ought to see how disappointed she looks."

"That is a very long story for such a small bird as you are," said Mr. Flicker to the hummer. "I could tell one twice as long."

Mr. Flicker was beginning his yarn all about how he scared some small boys just at sundown in a grove. He said he flew up quickly, and his flame-colored wing linings looked so much like fire that the boys ran away.

Just then Mr. Mocker set up such a noise, squalling like a chicken when it is caught, that the birds all flew away to their houses, all but the hummer. He wasn't afraid of a chicken, and he sat still in the lap of the sweet rose.

CHAPTER XXV.

AT THE GARDEN PARTY.

The morning dew was not off from the lilacs and the sweet calamus in the garden when the birds began to come to the party.

They came in pairs, and in groups, and in whole families. They were turning their heads this way and that, whispering and chatting and showing off their new spring suits, and looking shyly at the different kinds of food, like people at a picnic.

"Good morning," said old Mrs. Goldfinch to Mrs. Hummer. "I see you have a son almost as large as yourself. I do not understand how that can be so early in the season."

"Oh, I am very proud of my son," remarked Mrs. Hummer. "I have a daughter almost as large as my son. They are both very much like their father. I had good luck in raising them. It stormed once right into the nest, when they were very small and weak, but I kept mending the cradle as well as I could with thread which I bought of Mrs. Spider. I brought both of my children to the party with me."

"Oh, I never take my children to a party," said Mrs. Goldfinch. "I leave them with their nurse."

Mrs. Goldfinch said this with a haughty air, which quite amused Mrs. Hummer. She knew very well that Mrs. Goldfinch kept no nurse, but took care of her children herself night and day. "Very likely the cats will get them to-day," Mrs. Hummer was thinking.

"Good morning," said Mrs. Warbler to Mrs. Cliff Swallow. "I did not know you had returned. Have you come to stay with us now?"

"Oh, yes; I have come to stay," answered Mrs. Cliff Swallow. "We have taken rooms under the barn eaves. We are just making a cradle for the young ones we hope to have by and by. We have had a hard time to get all the mud we

wanted, and thought we should be obliged to give up nest-making for this year. There was a nice puddle in the road where we were at work; you know we like road mud best, because it is so fine and sticky. When school let out, the small boys threw stones at us, hoping to hit some of us, I suppose, and so we had to go down to the river to get our mud, and that wasn't half so good as the road mud."

"That is too bad," said Mrs. Warbler.

Mrs. Cliff Swallow went on to say, "We have just heard such a slander about our family. Mrs. Owl told us. She overheard it outside of a window in the evening. Somebody has started the story that we swallows have fleas and other vermin in our nests, and on that account we ought not to be allowed to build around houses and barns. It is a dreadful story, and so false. I wonder how it started. I felt almost too ashamed to come to the party."

"Too bad; too bad," said Mrs. Warbler again. "I would not pay any attention to it. Folks will say unkind things about us all, if they happen to find just one of us in mischief. Of course all birds do have a few little mites or fleas in their houses, and they can't help that, any more than those great human people can help having house-flies and mosquitoes about them where they live.

"Now some folks think I pick holes in the window screens, just because I love to run over them, up and down and all around, after the flies. To be sure, I do stick my toes through the meshes to hold myself on, but what of that? I love to peep through the window at people eating breakfast in the morning when the flies are stiff with cold on the outside. I can catch my game easily then."

Just then the new birds came along, and all the rest stood in a row to be introduced by Mrs. Mocker. "Mr. and Mrs. Bush-tit," she said, "let me present you to all of your neighbors."

The strangers shook hands all around, and then the birds fell to asking Mr. and Mrs. Bush-tit questions in true Yankee style.



California Bush-tit and Nest.

"Yes," they answered, "we are going to stay all this season. We are making a cradle in the eucalyptus house, which we have rented."

"Oh, I saw your cradle," said Mrs. Towhee; "it is such a queer one. It looks just like a bag with a little round hole in one side no bigger than a good-sized blackberry. What makes you build such a queer cradle as that?"

"That is the kind of a cradle all our family make. The little ones have to stay in until we boost them out, or until they are strong enough to climb out. It is very safe and warm. It is strong, too. We would not think of making such a cradle as you do, Mrs. Towhee. We felt very sorry one day when we found one of your babies dead on the ground, where it had fallen out of the nest when it was too

weak to fly."

"Well, we are glad to see you, anyway," said Mrs. Towhee, wiping the tears out of her eyes. "Now make yourselves at home, and let your little Tits come over and play with our little Towhees."

Mr. and Mrs. Bush-tit bowed politely, and then along came Mr. Bluebird. "Why, how do you do?" he said. "What brought you here? I thought you lived up in the mountain with the other Bush-tits."

"What brought you here?" they answered, laughing in the sweetest way. And then they agreed that our yard is a very nice place, and they thought they would "bring their friends" often and picnic.

"We never have rented a house in this street," said Mr. Bluebird, "but we may do so some day. Do you think it would be safe to try to raise a family so near those great people?"

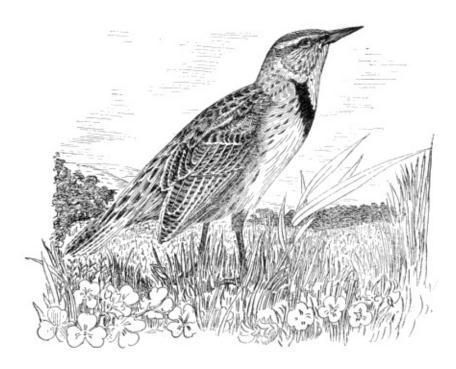
"We think so," said Mrs. Bush-tit, "but you ought to see them stand and stare at us. A big, kind-faced boy comes every day and writes in a note-book, looking straight into our house. Once he climbed up on a ladder and examined it. We were very much afraid, but he did us no harm. His eye was so blue and clear we could see ourselves in it. It looked just as if he couldn't hurt a bird.

"Then one day a lady came with the boy, and they both watched us and tried to make pictures of us, but we wouldn't keep still long enough. The lady is that boy's mother, and we heard her say, 'We'll tame these bush-tits some day, Jo, just as we did the humming-birds, and then we will write all about them for children to read."

Then Mr. Bluebird said, "Isn't it strange what queer things people do write about us? Sometimes they are right, and sometimes they are wrong. I wish some bird author would write a book about men and women and their queer ways. Wouldn't it be interesting?"

Then Madam Bush-tit laughed a merry little giggle that made Mr. Mocker look up in surprise, and he ran it over in an undertone before he should forget it.

Just then a yellow-breasted meadow lark carolled his sweet ditty on the tiptop of a pine tree. All the birds flew to welcome him to the garden party, coaxing him to stay and offering him lemonade from the cup of an orange blossom. They all loved Mr. Meadow Lark. "No, thank you," he said; "I must be off. I love the fields better than the door-yards, and the violets and the cream-cups look out for my drink. I just came a minute to say good morning."



MEADOW LARK.

A whole flock of wax-wings took possession of a pepper tree and began to throw the seeds down on the heads of the birds beneath. "Oh, excuse us," they said, "we are tourists, and this yard looked so inviting we stopped for a few moments. How much do you ask a dozen for these pepper berries? We do not have any in our country. They are good eating, we find, when one has learned how to manage them. You ought not to charge us a great price, for they are almost all seed. How much do you ask?"

All the birds laughed, and then Mr. Mocker imitated the wax-wings, calling out in a saucy tone, "How much do you ask? How much do you ask?" The wax-wings were offended and flew away, the bit of red wax on the tip of their wing feathers showing very plainly in the sunshine.

"As if we ever charge anybody anything for what they eat," said Mr. Warbler. "I'm hungry myself." Then Mrs. Towhee, who had really gotten up the garden party, called them to dinner.

All the birds helped themselves. The hummers dipped away down into the honey-pot of a morning-glory, and the towhees and mockers ate worms and crickets in the damp grass; the warblers snatched gnats on the wing, and the bush-tits ran up and down on the tree boughs, in search of bugs so small nobody else could see them. Each bird took the sort of food it liked best, drinking at the hydrant and breaking the bottles of the raspberry vines.

Suddenly along came Mr. Butcher-bird. "Go away, go away," all the birds cried. "Nobody invited you to our garden party."

"But I am here," said Mr. Butcher, in an impudent manner. "I should like to have a taste of that fat young hummer."

Mrs. Hummer screamed, and down swooped the butcher. Everybody thought he was going to make a meal of the baby, when he surprised them by grabbing up a great Jerusalem cricket and darting off with it.

Mr. Butcher-bird thought it was a good joke, and he laughed loudly from the peach tree. But the birds were so scared that they all flew away, and so the garden party broke up.

CHAPTER XXVI.

OUR BIRD HOSPITAL.

Cities have their hospitals for the sick and wounded. When an accident happens to a person in the street, or a man falls from a building, or is burned, or is hurt in any way, he is taken to the hospital, where the surgeon does what he can for him. Sometimes his life is saved by the surgeon's care and the kindness of trained nurses.

If a stranger in any city is taken sick, and has no friends to care for him, he is carried to the hospital, where he is nursed back to strength. If he has no money, he is quite welcome to all this.

A long while ago, when we first began to be interested in birds and to think of them as "people," like ourselves, we found it necessary to have a bird hospital.

Our native birds seldom meet with accidents unless they are killed outright; but the tourist birds are often found injured in some mysterious way, so that they cannot fly. We feel sorry for these strangers so far from home, and so we pick them up and carry them to our hospital.

We have several empty cages about, one being the big cage which used to be "Robby's" house. When Robin died, we thought it was a pity to give his cage away or to have it doing no good to anybody.

So we called it our hospital. This hospital is "In memory of Robin," as hospitals are sometimes built in "memory" of great men, or with money which rich men have left for that purpose.

We do not remember how many birds have been taken to our hospital, but there have been a great many. We use the "smaller wards"—the little cages, you know—for little solitary birds.

The last patients which we had in the large hospital were two wax-wings which we found maimed in some way so that they could not fly. They could get along pretty well low on the ground, but we were afraid the cats would steal them, and so our hospital nurse took charge of them.

At first they were very wild and would scream when we touched them. But they tamed readily, and in a day or two would sit on our fingers and eat from our hands. We knew they were berry and insect eaters; but, as it was winter, and the insects scarce, we could think of nothing they would like but the pepper berries. They lived on these for a few days, but evidently wanted other food.

We tried angle-worms, but these did not suit. One morning at breakfast little Sister, the hospital nurse, was holding one of the wax-wings on her finger, when it began to snatch at the bread crumbs. It was as if the little bird had been used to home-made bread all its life.



WAX-WING.

We kept these two beautiful patients in our hospital until they were quite strong, and just before the last of the tourists went away they joined their friends and flew off as if nothing had happened. We thought we saw them in the trees once again, but were not certain, all wax-wings look so very much alike. At first, when we let them out of the cage, they would run back and go in at the open door; but soon they heard their mates calling and joined them. We had their photographs taken just before they went away, as people have the pictures of their friends to "remember them by."

The birds who are at liberty are very attentive to the birds in the hospitals, and hop close to them, as if they were inquiring all about their troubles.

Besides these sick birds in the hospital, we have the "out patients," young birds which we feed and look after when they happen to fall out of the nests. They cry all about at nesting time, so that it is as much as one person can do to keep the cats away and see that nothing happens to them.

Boys in our neighborhood know how we love the birds, and often bring them to us if they are hurt, so that they may have the benefit of our hospital. This is better than to leave them where they happen to fall, for the cats and dogs to worry. There are many ways in which we can show our affection for these little people.

CHAPTER XXVII.

A SPLENDID COLLECTION.

We could never finish a book if we told all there is to know about birds. So we shall have to close our story about these people, hoping that children who read it will love the birds better than they ever did before.

The birds will stay with you wherever you live, even if it is on a lonely island or a western prairie. There will be garden parties, and morning concerts, and evening serenades, and visiting birds will drop into your yards and stop awhile. Birds are just like other people; they like to take a meal with a neighbor now and then. It makes good feeling on both sides.

Any one can have a fine collection of beautiful birds without going to the museums. Not dead, stuffed, songless creatures, who cannot say "Thank you" for a crumb, or warble you a melody in return for a home in your yard. You can have this splendid collection flying from tree to tree, and making cradles among the flowers, and giving a garden party every day in the year, even though the snow lies on the ground.

There are wise people who study birds all their lives, never killing the little things to put away in a drawer with camphor balls. Such people come to love the birds very much, and to know their sweet, wise doings in a way that a person with a gun can never know them. Sick people can sit in the sunshine or in the shade and study the birds, and grow stronger as well as wiser.

There are some strange collections of birds to be found in milliners' shops. The milliners are not to blame for these, for if good and kind people did not want any out of their collection, they would not keep so many.

Sometime on your way home from school, if your mother is not wanting to see you early, look in at these show windows and see the collections we are speaking of. These birds are sold to foolish women and girls, and worn to church and everywhere else on hats and bonnets.

See how distressed the poor dead creatures seem to be,—how they are

twisted all out of shape. They are made to squat or perch in positions that make them look as if they were in agony. Not one of them all has a natural, happy look, because the people who put them up to sell have never loved the birds nor studied their ways. All they care about is the money they can get for them.

You will notice that some of the birds in ladies' bonnets have been cut in two. Sometimes just the head and wings are to be seen. If these ladies stopped to see what they were doing, and to think of how ridiculous they look, they would never wear these ornaments, just like savages.



SNOWY HERON.

Many of the birds that are very rare and beautiful have been nearly or quite all killed for this fashion. Some of the most delicate plumes you see have been taken from the egret, or white heron, at nesting time. The mothers are shot or stoned to death very easily, because they will not leave their young. It is said that many are left wounded and yet alive after the plumes have been stripped off. There is no one to care for the young which are left in their nests, and so they die of cold and hunger. All this suffering is just to satisfy the cruel pride of women and girls who must wear birds in their bonnets.

If boys would resolve never to kill a bird, even though they could get money by doing it; and if girls would resolve never to wear a bird or a bird's wing on their hats, our country would be more beautiful with song and color than it has ever been.

We sat in church the other day, and in front of us was a lady with nine bird's wings on her bonnet. She was a tender-hearted lady, and probably would not hurt a fly herself. Yet her pride had really caused the death and suffering of five birds, and possibly of fifteen or twenty birdlings. She did not stop to think. Will you, kind reader, stop to think?

READING.

- **Badlam's Suggestive Lessons in Language and Reading.** A manual for primary teachers. Plain and practical; being a transcript of work actually done in the school-room. \$1.50.
- **Badlam's Stepping-Stones to Reading.—A Primer.** Supplements the 283-page book above. Boards. 30 cts.
- **Badlam's First Reader.** New and valuable word-building exercises, designed to follow the above. Boards. 35 cts.
- **Bass's Nature Stories for Young Readers: Plant Life.** Intended to supplement the first and second reading-books. Boards. 30 cts.
- **Bass's Nature Stories for Young Readers: Animal Life.** Gives lessons on animals and their habits. To follow second reader.

- Boards. 40 cts.
- **Firth's Stories of Old Greece.** Contains 17 Greek myths adapted for reading in intermediate grades. Illustrated. Boards. 35 cts.
- **Fuller's Illustrated Primer.** Presents the word-method in a very attractive form to the youngest readers. Boards. 30 cts.
- **Hall's How to Teach Reading.** Treats the important question: what children should and should not read. Paper, 25 cts.
- **Miller's My Saturday Bird Class.** Designed for use as a supplementary reader in lower grades or as a text-book of elementary ornithology. Boards. 30 cts.
- **Norton's Heart of Oak Books.** This series is of material from the standard imaginative literature of the English language. It draws freely upon the treasury of favorite stories, poems, and songs with which every child should become familiar, and which have done most to stimulate the fancy and direct the sentiment of the best men and women of the English-speaking race. Book I, 100 pages, 25 cts.; Book II, 142 pages, 35 cts.; Book III, 265 pages, 45 cts.; Book IV, 303 pages, 55 cts.; Book V, 359 pages, 65 cts.; Book VI, 367 pages, 75 cts.
- **Penniman's School Poetry Book.** Gives 73 of the best short poems in the English language. Boards. 35 cts.
- **Smith's Reading and Speaking.** Familiar Talks to those who would speak well in public, so cts.
- **Spear's Leaves and Flowers.** Designed for supplementary reading in lower grades or as a text-book of elementary botany. Boards. 30015.
- **Ventura's Mantegazza's Testa.** A book to help boys toward a complete self-development. \$1.00.
- **Wright's Nature Reader, No. I.** Describes crabs, wasps, spiders, bees, and some univalve mollusks. Boards. 30 cts.
- Wright's Nature Reader, No. II. Describes ants, flies, earth-worms,

beetles, barnacles and star-fish. Boards. 40 cts.

- **Wright's Nature Reader, No. III.** Has lessons in plant-life, grasshoppers, butter flies, and birds. Boards. 60 cts.
- **Wright's Nature Reader, No. IV.** Has lessons in geology, astronomy, world-life, etc. Boards. 70 cts.

For advanced supplementary reading see our list of books in English Literature.

D. C. HEATH & CO., PUBLISHERS,

BOSTON. NEW YORK. CHICAGO.

Number.

- **Atwood's Complete Graded Arithmetic.** Present a carefully graded course in arithmetic, to begin with the fourth year and continue through the eighth year. Part I. 200 pages. Cloth. 40 cts. Part II. 382 pages. Half leather. 75 cts.
- Walsh's Mathematics for Common Schools. Special features of this work are its division into half-yearly chapters instead of the arrangement by topics; the omission, as far as possible, of rules and definitions; the great number and variety of the problems: the use of the equation in solution of arithmetical problems; and the introduction of the elements of algebra and geometry. Three Book Series—Elementary, 218 pages. 35 cts. Intermediate, 252 pages. 40 cts. Higher, 387 pages. Half leather. 75 cts. Two Book Series—Primary, 198 pages, 35 cts. Grammar School, 433 pages. Half leather. 75 cts.

Sutton and Kimbrough's Pupils' Series of Arithmetics.

- PRIMARY BOOK. Embraces the four fundamental operations in all their simple relations. 80 pages. Cloth. 25 cts.
- Intermediate Book. Embraces practical work through percentage and simple interest. 145 pages. Cloth. 30 cts.

- Lower Book. Primary and Intermediate Books bound together. Cloth. 45 cts.
- HIGHER BOOK. A compact volume for efficient work which makes clear all necessary theory. 275 pages. Half leather. 75 cts.
- **Safford's Mathematical Teaching.** Presents the best methods of teaching, from primary arithmetic to the calculus. Paper. 25 cts.
- **Badlam's Aids to Number.** *For Teachers. First Series.* Consists of 25 cards for sight-work with objects from one to ten. 40 cts.
- **Badlam's Aids to Number.** *For Pupils. First Series.* Supplements the above with material for slate work. Leatherette. 30 cts.
- **Badlam's Aids to Number.** *For Teachers. Second Series.* Teachers' sight-work with objects above ten. 40 cts.
- **Badlam's Aids to Number.** *For Pupils. Second Series.* Supplements above with material for slate work from 10 to 20. Leatherette. 30 cts.
- **Badlam's Number Chart.** 11×14 inches. Designed to aid in teaching the four fundamental rules in lowest primary grades. 5 cts. each; per hundred \$4.00.
- **Sloane's Practical Lessons in Fractions.** For elementary grades. Boards 30 cts. Set of six fraction cards for children to cut. 12 cts.
- **White's Two Years with Numbers.** Number Lessons for second and third year pupils. 40 cts.
- **White's Junior Arithmetic.** For fourth and fifth year pupils. Cloth. 50 cts.

White's Senior Arithmetic. In press.

For advanced work see our list of books in Mathematics.

D. C. HEATH & CO., PUBLISHERS,

BOSTON. NEW YORK. CHICAGO.

ENGLISH LANGUAGE.

- **Hyde's Lessons in English, Book I.** For the lower grades. Contains exercises for reproduction, picture lessons, letter writing, uses of parts of speech, etc. 40 cts.
- **Hyde's Lessons in English, Book II.** For Grammar schools. Has enough technical grammar for correct use of language. Co cts.
- **Hyde's Lessons in English, Book II with Supplement.** Has, in addition to the above, 118 pages of technical grammar. 70 cts.
- Supplement bound alone, 35 cts.
- **Hyde's Practical English Grammar.** For advanced classes in grammar schools and for high schools. 60 cts.
- **Hyde's Lessons in English, Book II with Practical Grammar.** The Practical Grammar and Book II bound together. 80 cts.
- **Hyde's Derivation of Words.** 15 cts.
- **Penniman's Common Words Difficult to Spell.** Graded lists of common words often misspelled. Boards. 25 cts.
- **Penniman's Prose Dictation Exercises.** Short extracts from the best authors. Boards. 30 cts.
- **Spalding's Problem of Elementary Composition.** Suggestions for its solution. Cloth. 45 cts.
- Mathews's Outline of English Grammar, with Selections for Practice. The application of principles is made through composition of original sentences. 80 cts.
- **Buckbee's Primary Word Book.** Embraces thorough drills in articulation and in the primary difficulties of spelling and sound. 30 cts.
- **Sever's Progressive Speller.** For use in advanced primary, intermediate, and grammar grades. Gives spelling, pronunciation, definition, and use of words. 30 cts.

- **Badlam's Suggestive Lessons in Language.** Being Part I and Appendix of Suggestive Lessons in Language and Reading. 50 cts.
- **Smith's Studies in Nature, and Language Lessons.** A combination of object lessons with language work. 50 cts. Part I bound separately, 25 cts.
- **Meiklejohn's English Language.** Treats salient features with a master's skill and with the utmost clearness and simplicity. \$1.30.
- **Meiklejohn's English Grammar.** Also composition, versification, paraphrasing, etc For high schools and colleges, go cts.
- **Meiklejohn's History of the English Language.** 78 pages. Part III of English Language above, 35 cts.
- **Williams's Composition and Rhetoric by Practice.** For high school and college. Combines the smallest amount of theory with an abundance of practice. Revised edition. \$1.00.
- **Strang's Exercises in English.** Examples in Syntax, Accidence, and Style for criticism and correction. 50 cts.
- **Huffcutt's English in the Preparatory School.** Presents advanced methods of teaching English grammar and composition in the secondary schools. 25 cts.
- **Woodward's Study of English.** From primary school to college. 25 cts.
- **Genung's Study of Rhetoric.** Shows the most practical discipline. 25 cts.

See also our list of books for the study of English Literature.

D. C. HEATH & CO., PUBLISHERS,

BOSTON. NEW YORK. CHICAGO.

Transcriber's Note

Text was relocated to prevent illustrations from splitting paragraphs. Minor typos were corrected. The final footnote on Page 144 was missing and the anchor was deleted. Several cases of a possible "æ" ligature were printed as individual characters and were left that way.

*** END OF THE PROJECT GUTENBERG EBOOK OUR FEATHERED FRIENDS ***

Updated editions will replace the previous one—the old editions will be renamed.

Creating the works from print editions not protected by U.S. copyright law means that no one owns a United States copyright in these works, so the Foundation (and you!) can copy and distribute it in the United States without permission and without paying copyright royalties. Special rules, set forth in the General Terms of Use part of this license, apply to copying and distributing Project Gutenberg™ electronic works to protect the PROJECT GUTENBERG™ concept and trademark. Project Gutenberg is a registered trademark, and may not be used if you charge for an eBook, except by following the terms of the trademark license, including paying royalties for use of the Project Gutenberg trademark. If you do not charge anything for copies of this eBook, complying with the trademark license is very easy. You may use this eBook for nearly any purpose such as creation of derivative works, reports, performances and research. Project Gutenberg eBooks may be modified and printed and given away--you may do practically ANYTHING in the United States with eBooks not protected by U.S. copyright law. Redistribution is subject to the trademark license, especially commercial redistribution.

START: FULL LICENSE THE FULL PROJECT GUTENBERG LICENSE PLEASE READ THIS BEFORE YOU DISTRIBUTE OR USE THIS WORK

To protect the Project GutenbergTM mission of promoting the free distribution of electronic works, by using or distributing this work (or any other work associated in any way with the phrase "Project Gutenberg"), you agree to comply with all the terms of the Full Project GutenbergTM License available with this file or online at www.gutenberg.org/license.

Section 1. General Terms of Use and Redistributing Project Gutenberg™ electronic works

- 1.A. By reading or using any part of this Project Gutenberg[™] electronic work, you indicate that you have read, understand, agree to and accept all the terms of this license and intellectual property (trademark/copyright) agreement. If you do not agree to abide by all the terms of this agreement, you must cease using and return or destroy all copies of Project Gutenberg[™] electronic works in your possession. If you paid a fee for obtaining a copy of or access to a Project Gutenberg[™] electronic work and you do not agree to be bound by the terms of this agreement, you may obtain a refund from the person or entity to whom you paid the fee as set forth in paragraph 1.E.8.
- 1.B. "Project Gutenberg" is a registered trademark. It may only be used on or associated in any way with an electronic work by people who agree to be bound by the terms of this agreement. There are a few things that you can do with most Project Gutenberg™ electronic works even without complying with the full terms of this agreement. See paragraph 1.C below. There are a lot of things you can do with Project Gutenberg™ electronic works if you follow the terms of this agreement and help preserve free future access to Project Gutenberg™ electronic works. See paragraph 1.E below.
- 1.C. The Project Gutenberg Literary Archive Foundation ("the Foundation" or PGLAF), owns a compilation copyright in the collection of Project Gutenberg™ electronic works. Nearly all the individual works in the collection are in the public domain in the United States. If an individual work is unprotected by copyright law in the United States and you are located in the United States, we do not claim a right to prevent you from copying, distributing, performing, displaying or creating derivative works based on the work as long as all

references to Project Gutenberg are removed. Of course, we hope that you will support the Project GutenbergTM mission of promoting free access to electronic works by freely sharing Project GutenbergTM works in compliance with the terms of this agreement for keeping the Project GutenbergTM name associated with the work. You can easily comply with the terms of this agreement by keeping this work in the same format with its attached full Project GutenbergTM License when you share it without charge with others.

- 1.D. The copyright laws of the place where you are located also govern what you can do with this work. Copyright laws in most countries are in a constant state of change. If you are outside the United States, check the laws of your country in addition to the terms of this agreement before downloading, copying, displaying, performing, distributing or creating derivative works based on this work or any other Project GutenbergTM work. The Foundation makes no representations concerning the copyright status of any work in any country other than the United States.
- 1.E. Unless you have removed all references to Project Gutenberg:
- 1.E.1. The following sentence, with active links to, or other immediate access to, the full Project Gutenberg[™] License must appear prominently whenever any copy of a Project Gutenberg[™] work (any work on which the phrase "Project Gutenberg" appears, or with which the phrase "Project Gutenberg" is associated) is accessed, displayed, performed, viewed, copied or distributed:

This eBook is for the use of anyone anywhere in the United States and most other parts of the world at no cost and with almost no restrictions whatsoever. You may copy it, give it away or re-use it under the terms of the Project Gutenberg License included with this eBook or online at www.gutenberg.org. If you are not located in the United States, you will have to check the laws of the country where you are located before using this eBook.

1.E.2. If an individual Project Gutenberg[™] electronic work is derived from texts not protected by U.S. copyright law (does not contain a notice indicating that it is posted with permission of the copyright holder), the work can be copied and distributed to anyone in the United States without paying any fees or charges. If you are redistributing or providing access to a work with the phrase "Project Gutenberg" associated with or appearing on the work, you must comply either with the requirements of paragraphs 1.E.1 through 1.E.7 or obtain permission for

the use of the work and the Project GutenbergTM trademark as set forth in paragraphs 1.E.8 or 1.E.9.

- 1.E.3. If an individual Project Gutenberg[™] electronic work is posted with the permission of the copyright holder, your use and distribution must comply with both paragraphs 1.E.1 through 1.E.7 and any additional terms imposed by the copyright holder. Additional terms will be linked to the Project Gutenberg[™] License for all works posted with the permission of the copyright holder found at the beginning of this work.
- 1.E.4. Do not unlink or detach or remove the full Project Gutenberg[™] License terms from this work, or any files containing a part of this work or any other work associated with Project Gutenberg[™].
- 1.E.5. Do not copy, display, perform, distribute or redistribute this electronic work, or any part of this electronic work, without prominently displaying the sentence set forth in paragraph 1.E.1 with active links or immediate access to the full terms of the Project GutenbergTM License.
- 1.E.6. You may convert to and distribute this work in any binary, compressed, marked up, nonproprietary or proprietary form, including any word processing or hypertext form. However, if you provide access to or distribute copies of a Project Gutenberg™ work in a format other than "Plain Vanilla ASCII" or other format used in the official version posted on the official Project Gutenberg™ website (www.gutenberg.org), you must, at no additional cost, fee or expense to the user, provide a copy, a means of exporting a copy, or a means of obtaining a copy upon request, of the work in its original "Plain Vanilla ASCII" or other form. Any alternate format must include the full Project Gutenberg™ License as specified in paragraph 1.E.1.
- 1.E.7. Do not charge a fee for access to, viewing, displaying, performing, copying or distributing any Project GutenbergTM works unless you comply with paragraph 1.E.8 or 1.E.9.
- 1.E.8. You may charge a reasonable fee for copies of or providing access to or distributing Project GutenbergTM electronic works provided that:
- You pay a royalty fee of 20% of the gross profits you derive from the use of Project GutenbergTM works calculated using the method you already use to calculate your applicable taxes. The fee is owed to the owner of the Project

GutenbergTM trademark, but he has agreed to donate royalties under this paragraph to the Project Gutenberg Literary Archive Foundation. Royalty payments must be paid within 60 days following each date on which you prepare (or are legally required to prepare) your periodic tax returns. Royalty payments should be clearly marked as such and sent to the Project Gutenberg Literary Archive Foundation at the address specified in Section 4, "Information about donations to the Project Gutenberg Literary Archive Foundation."

- You provide a full refund of any money paid by a user who notifies you in writing (or by e-mail) within 30 days of receipt that s/he does not agree to the terms of the full Project GutenbergTM License. You must require such a user to return or destroy all copies of the works possessed in a physical medium and discontinue all use of and all access to other copies of Project GutenbergTM works.
- You provide, in accordance with paragraph 1.F.3, a full refund of any money paid for a work or a replacement copy, if a defect in the electronic work is discovered and reported to you within 90 days of receipt of the work.
- You comply with all other terms of this agreement for free distribution of Project GutenbergTM works.
- 1.E.9. If you wish to charge a fee or distribute a Project Gutenberg[™] electronic work or group of works on different terms than are set forth in this agreement, you must obtain permission in writing from the Project Gutenberg Literary Archive Foundation, the manager of the Project Gutenberg[™] trademark. Contact the Foundation as set forth in Section 3 below.

1.F.

- 1.F.1. Project Gutenberg volunteers and employees expend considerable effort to identify, do copyright research on, transcribe and proofread works not protected by U.S. copyright law in creating the Project Gutenberg™ collection. Despite these efforts, Project Gutenberg™ electronic works, and the medium on which they may be stored, may contain "Defects," such as, but not limited to, incomplete, inaccurate or corrupt data, transcription errors, a copyright or other intellectual property infringement, a defective or damaged disk or other medium, a computer virus, or computer codes that damage or cannot be read by your equipment.
- 1.F.2. LIMITED WARRANTY, DISCLAIMER OF DAMAGES Except for the "Right of Replacement or Refund" described in paragraph 1.F.3, the Project Cutanhara Litarany Archive Foundation, the average of the Project Cutanhara TM

trademark, and any other party distributing a Project Gutenberg[™] electronic work under this agreement, disclaim all liability to you for damages, costs and expenses, including legal fees. YOU AGREE THAT YOU HAVE NO REMEDIES FOR NEGLIGENCE, STRICT LIABILITY, BREACH OF WARRANTY OR BREACH OF CONTRACT EXCEPT THOSE PROVIDED IN PARAGRAPH 1.F.3. YOU AGREE THAT THE FOUNDATION, THE TRADEMARK OWNER, AND ANY DISTRIBUTOR UNDER THIS AGREEMENT WILL NOT BE LIABLE TO YOU FOR ACTUAL, DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE OR INCIDENTAL DAMAGES EVEN IF YOU GIVE NOTICE OF THE POSSIBILITY OF SUCH DAMAGE.

- 1.F.3. LIMITED RIGHT OF REPLACEMENT OR REFUND If you discover a defect in this electronic work within 90 days of receiving it, you can receive a refund of the money (if any) you paid for it by sending a written explanation to the person you received the work from. If you received the work on a physical medium, you must return the medium with your written explanation. The person or entity that provided you with the defective work may elect to provide a replacement copy in lieu of a refund. If you received the work electronically, the person or entity providing it to you may choose to give you a second opportunity to receive the work electronically in lieu of a refund. If the second copy is also defective, you may demand a refund in writing without further opportunities to fix the problem.
- 1.F.4. Except for the limited right of replacement or refund set forth in paragraph 1.F.3, this work is provided to you 'AS-IS', WITH NO OTHER WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PURPOSE.
- 1.F.5. Some states do not allow disclaimers of certain implied warranties or the exclusion or limitation of certain types of damages. If any disclaimer or limitation set forth in this agreement violates the law of the state applicable to this agreement, the agreement shall be interpreted to make the maximum disclaimer or limitation permitted by the applicable state law. The invalidity or unenforceability of any provision of this agreement shall not void the remaining provisions.
- 1.F.6. INDEMNITY You agree to indemnify and hold the Foundation, the trademark owner, any agent or employee of the Foundation, anyone providing

copies of Project GutenbergTM electronic works in accordance with this agreement, and any volunteers associated with the production, promotion and distribution of Project GutenbergTM electronic works, harmless from all liability, costs and expenses, including legal fees, that arise directly or indirectly from any of the following which you do or cause to occur: (a) distribution of this or any Project GutenbergTM work, (b) alteration, modification, or additions or deletions to any Project GutenbergTM work, and (c) any Defect you cause.

Section 2. Information about the Mission of Project Gutenberg™

Project GutenbergTM is synonymous with the free distribution of electronic works in formats readable by the widest variety of computers including obsolete, old, middle-aged and new computers. It exists because of the efforts of hundreds of volunteers and donations from people in all walks of life.

Volunteers and financial support to provide volunteers with the assistance they need are critical to reaching Project GutenbergTM's goals and ensuring that the Project GutenbergTM collection will remain freely available for generations to come. In 2001, the Project Gutenberg Literary Archive Foundation was created to provide a secure and permanent future for Project GutenbergTM and future generations. To learn more about the Project Gutenberg Literary Archive Foundation and how your efforts and donations can help, see Sections 3 and 4 and the Foundation information page at www.gutenberg.org.

Section 3. Information about the Project Gutenberg Literary Archive Foundation

The Project Gutenberg Literary Archive Foundation is a non-profit 501(c)(3) educational corporation organized under the laws of the state of Mississippi and granted tax exempt status by the Internal Revenue Service. The Foundation's EIN or federal tax identification number is 64-6221541. Contributions to the Project Gutenberg Literary Archive Foundation are tax deductible to the full extent permitted by U.S. federal laws and your state's laws.

The Foundation's business office is located at 809 North 1500 West, Salt Lake City, UT 84116, (801) 596-1887. Email contact links and up to date contact information can be found at the Foundation's website and official page at www.gutenberg.org/contact

Section 4. Information about Donations to the Project Gutenberg Literary Archive Foundation

Project GutenbergTM depends upon and cannot survive without widespread public support and donations to carry out its mission of increasing the number of public domain and licensed works that can be freely distributed in machine-readable form accessible by the widest array of equipment including outdated equipment. Many small donations (\$1 to \$5,000) are particularly important to maintaining tax exempt status with the IRS.

The Foundation is committed to complying with the laws regulating charities and charitable donations in all 50 states of the United States. Compliance requirements are not uniform and it takes a considerable effort, much paperwork and many fees to meet and keep up with these requirements. We do not solicit donations in locations where we have not received written confirmation of compliance. To SEND DONATIONS or determine the status of compliance for any particular state visit www.gutenberg.org/donate.

While we cannot and do not solicit contributions from states where we have not met the solicitation requirements, we know of no prohibition against accepting unsolicited donations from donors in such states who approach us with offers to donate.

International donations are gratefully accepted, but we cannot make any statements concerning tax treatment of donations received from outside the United States. U.S. laws alone swamp our small staff.

Please check the Project Gutenberg web pages for current donation methods and addresses. Donations are accepted in a number of other ways including checks, online payments and credit card donations. To donate, please visit: www.gutenberg.org/donate

Section 5. General Information About Project Gutenberg™ electronic works

Professor Michael S. Hart was the originator of the Project GutenbergTM concept of a library of electronic works that could be freely shared with anyone. For forty years, he produced and distributed Project GutenbergTM eBooks with only a loose network of volunteer support.

Project GutenbergTM eBooks are often created from several printed editions, all of which are confirmed as not protected by copyright in the U.S. unless a copyright notice is included. Thus, we do not necessarily keep eBooks in compliance with any particular paper edition.

Most people start at our website which has the main PG search facility: www.gutenberg.org.

This website includes information about Project GutenbergTM, including how to make donations to the Project Gutenberg Literary Archive Foundation, how to help produce our new eBooks, and how to subscribe to our email newsletter to hear about new eBooks.